

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 1 of 3

observer's MH Date 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. ($^{\circ}$ C.) 16/17 Cloud cover

Plot AA 96 Visit 29 Area 6 Isolation 35/36 Border 37/38/39/40
 No. 26/27/28 No. 29 (ha) 30/31/32 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-61 Σ adults <50
	1	2	3	4								
RE VI					5-4-3 12 4 5	2-1-1 4 13 2	0	0	2-1-1 4 13 2	4-4-3 11 3.7 4	0	0
CO CR					0	0	0	2-1-2 5 1.7 2	2-1-2 5 1.7 2	0		
WO TH					2-2-0 4 1.3 2	1-1-0 2 0.7 1	0	0	1-1-0 2 0.7 1	2-2-0 4 1.3 2		
CH SP					4-5-1 10 33 5	1-2-1 4 1.3 2	0		1-2-1 4 1.3 2	4-4-1 9 3 4		
HO WA					3-0-0 3 1 3	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	3-0-0 3 1 3		
AC FL					3-0-0 3 1 3	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	3-0-0 3 1 3		
AM RO					4-3-8 15 5 8	1-1-2 4 1.3 2	2-1-2 5 1.7 2		2-2-4 9 3 4	2-2-4 8 2.7 4		
CA CH					3-4-8 15 5 8	0-1-1 2 0.7 1	1-0-1 2 0.7 1		1-1-2 4 1.3 2	3-4-4 11 3.7 4		
CA RO					2-4-1 7 2.3 4	0-1-1 2 0.7 1	1-1-0 2 0.7 1		1-2-1 4 1.3 2	2-2-1 5 1.7 2		
NO PA					2-0-0 2 0.7 2	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	2-0-0 2 0.7 2		
TY TI					1-0-1 2 0.7 1	1-0-1 2 0.7 1	0		1-0-1 2 0.7 1	1-0-1 2 0.7 1		

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 2 of 3

Observer's initials 1/2 Date (Julian) 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover

nd 22 Plot AA 9C Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-6 Σ adult <50
	1	2	3	4								
MO CH					0-5-8 13 4.3 8	0-2-2 4 1.3 2	0	0	0-2-2 4 1.3 2	0-4-4 8 2.7 4	0	0
SC TA					0-4-0 4 1.3 4	0-1-0 1 0.3 1	0	0	0-1-0 1 0.3 1	0-4-0 4 1.3 4		
ST AR					0-12-4 16 5.3 12	0	0-4-2 6 2 4	0	0-4-2 6 2 4	0-4-3 7 2.3 4		
CO GR					0-4-0 4 1.3 4	0	0-3-0 3 1 3	0-0-3 3 1 3	0-3-3 6 2 3	0-3-0 3 1 3		
OV EN					0-4-4 8 2.7 4	0-1-2 3 1 2	0	0	0-1-2 3 1 2	0-4-3 7 2.3 4		
BO BW					0-4-0 4 1.3 4	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-4-0 4 1.3 4		
RW BL					0-1-0 1 0.3 1	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-1-0 1 0.3 1		
GR CA					0-1-1 2 0.7 1	0-0-1 1 0.3 1	0-1-0 1 0.3 1		0-1-1 2 0.7 1	0-1-1 2 0.7 1		
IN BY					0-1-3 4 1.3 3	0-1-1 2 0.7 1	0		0-1-1 2 0.7 1	0-1-3 4 1.3 3		
YB CG					0-1-1 2 0.7 1	0-1-1 2 0.7 1	0		0-1-1 2 0.7 1	0-1-1 2 0.7 1		
RB WD					0-0-1 1 0.3 1	0	0-0-1 1 0.3 1		0-0-1 1 0.3 1	0-0-1 1 0.3 1		

Sheet # 30 of 3

nd	Plot	Visit	Area	Isola-	Border
	No.	No.	(ha)	tion	Type
22	AA96 26/27/28	29	30/31/32	35/36	37/38/39/40

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's MH Date 145 Yr. 79 Time 0630 to 0650 Temp. 19 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (⁰C.) 16/17 cover 2

End 1 Plot A96 Visit 1 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 tion 37/38/39/40 Type

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
RE VI	+	+	+	+	5	2			2	4		
Am Cr	-	-	-	-	4		2 →		2	4		
Wo Th	+	+			2	1			1	2		
Ch Sp	+	+	+	+	4	1			1	4		
Ho bwa	+		+	+	3	1			1	3		
Ac Fl	+	+		+	3	1			1	3		
Am Ro		-	+	-	4	1	2		3	2		
Ca Ch		-	-	-	3		1		1	3		
CA RD		-		-	2		1		1	2		
PA wa			+	+	2	1			1	2		
To Ti			+		1	1			1	1		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 1996 1

Observer's MH Date 158 Yr. 79 Time 0913 to 0933 Temp. 76 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 1 Plot AA76 Visit 2 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
BE V1	x	x	x	x	4	1			1	4		
CA CH	x	x	x	-	4	1			1	4		
MD CH	x	x	x	x x	5	2			2	4		
AM RO	x	-		-	3	1	1		2	2		
CH SP	x	x	x	x	5	2			2	4		
SC TA	x	x	x	x	4	1			1	4		
ST AB	=	=			12		4		4	4		
EO CX		-	-		4		3		3	3		
CA BD	-	-			4	1	1		2	2		
DV FM		x	x	x	4	1			1	4		
BO BW	x	x	x	x	4	1			1	4		

1952 2

end

[illegible]

X=singing males; -=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

page 1

Observer's MH Date 169 Yr. 79 Time 0647 to 0707 Temp. ⁴⁵16/17 Cloud 1
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover

and 1 Plot AA96 Visit 3 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 tion 37/38/39/40 Type

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
MO CH	X X	X X	X X	X X	8	2			2	4		
CA SP	X				1	1			1	1		
AM AD	X -	X X	X -	X	8	2	2		4	4		
CA CH	=	X	=	=	8	1	1		2	4		
AM CR		V		V				2	2			
OV EN	X	X X		X	4	2			2	3		
AB WO	-				1		1		1	1		
CO GR	VV	V						3	3			
TH TJ	X				1	1			1	1		
EA HI	-				1		1		1	1		
ST AR	-	-	-	-	4		2		2	3		

page 2

id	Plot	Visit	Area	Isola-	Border
	No.	No.	(ha)	tion	Type
22	AA96 26/27/28	29	30/31/32	35/36	37/38/39/40

[illegible]

♀=singing male; ♂=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 SHEET #1 of 2

Observer's JA Date 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover 2
 Initials. 1/2 (Julian) 3/4/5 6/7
 and 22 Plot AA99 Visit 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40
 No. 26/27/28 No. 29

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
CR CA					5-3-0 8 2.7 5	2-2-0 4 1.3 2	0	0	2-2-0 4 1.3 2	4-2-0 6 2 4	0	1-0-0 1 0.3 1
BL JA					3-0-8 11 3.7 8	0	1-0-4 5 1.7 4	0	1-0-4 5 1.7 4	3-0-4 7 2.3 4	0-0-1 1 0.3 1	1-0-2 3 1 2
TH TI					3-6-0 9 3 6	2-2-0 4 1.3 2	0	0	2-2-0 4 1.3 2	2-4-0 6 2 4	0	0
GC FL					2-1-2 5 1.7 2	1-1-1 3 1 1	0	0	1-1-1 3 1 1	2-1-2 5 1.7 2		
WO TH					9-6-3 18 6 9	3-2-1 6 2 3	0-1-0 1 0.3 1	0	3-3-1 7 2.3 3	4-4-3 11 3.7 4		
RB WO					3-3-1 7 2.3 3	1-1-1 3 1 1	0	0	1-1-1 3 1 1	3-3-1 7 2.3 3		
OV EN					2-0-0 2 0.7 2	1-0-0 1 0.3 1	0	0	1-0-0 1 0.3 1	2-0-0 2 0.7		
CO GR					6-16-1 18 6 16	0	3-6-1 7 2.3 6	1-0-4 5 1.7 4	4-6-5 15 5 6	3-4-1 8 2.7 4		
YS FL					1-0-2 3 1 2	1-0-0 1 0.3 1	0-0-1 1 0.3 1	0	1-0-1 2 0.7 1	1-0-2 3 1 2		
CO CR					5-0-1 6 2 5	0	2-0-1 3 1 2	0	2-0-1 3 1 2	4-0-1 5 1.7 4		
MO DO					5-0-0 5 1.7 5	2-0-0 2 0.7 2	0	0	2-0-0 2 0.7 2	3-0-0 3 1 3		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 SHEET #2 of 3

Observer's Date Yr. 79 Time to Temp. Cloud
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover 2
 and Plot AA99 Visit Area Isolation Border
 22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

Observer	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
CA WR					2-0-0 2 0.7 2	1-0-0 1 0.3 1	0	0	1-0-0 1 0.3 1	2-0-0 2 0.7 2	0	0
CA RD					3-9-4 16 5.3 9	2-2-0 4 1.3 2	0-1-2 3 1 2	0	2-3-2 7 2.3 3	2-4-3		0-1-0 1 0.3 1
CA CH					2-8-4 14 4.7 8	0-0-1 1 0.3 1	1-2-0 3 1 2	0	1-2-1 4 1.3 2	2-4-4 10 3.3 4		0
EW PE					0-3-0 3 1 3	0-1-0 1 0.3 1	0	0	0-1-0 1 0.3 1	0-3-0 3 1 3		
SC TA					0-4-3 7 2.3 4	0-1-1 2 0.7 1	0	0	0-1-1 2 0.7 1	0-4-3 7 2.3 4		
ST AR					0-1-0 1 0.3 1	0	0-1-0 1 0.3 1	0	0-1-0 1 0.3 1	0-1-0 1 0.3 1		
AM RD					0-5-0 5 1.7 5	0	0-2-0 2 0.7 2	0	0-2-0 2 0.7 2	0-3-0 3 1 3		
YB CH					0-1-0 1 0.3 1	0-1-0 1 0.3 1	0	0	0-1-0 1 0.3 1	0-1-0 1 0.3 1		
AM GO					0	0	0	0-1-0 1 0.3 1	0-1-0 1 0.3 1	0		
CH SW					0	0	0	0-1-0 1 0.3 1	0-1-0 1 0.3 1	0		
HA WO					0-0-1 1 0.3 1	0	0-0-1 1 0.3 1	0	0-0-1 1 0.3 1	0-0-1 1 0.3 1		

3043

Ind	Plot	Visit	Area	Isola-	Border
	No.	No.	(ha)	tion	Type
22	26/27/28	29	30/31/32	35/36	37/38/39/40

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

PAGE 1 of 2

Observer's TA Date 142 Yr. 79 Time 0550 to 0610 Temp. 60 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover 2

and 2 Plot AA99 Visit 1 Area Isolation Border
 22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

(PAGE #1)

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
GRCA	⊕	x	x	x	5	2			2	4		1
BLJA	-	⊖		-	3		1		1	3		1
TUTI	x			+ x	3	2			2	2		
GCFL	x	x			2	1			1	2		
WOTH	x x	x x	x x	x	9	3			3	4		
RBWD	x	x	x		3	1			1	3		
OVEN	x	x			2	1			1	2		
COGR	- -		= v	- v	6		3	1	4	3		
XSFL	x				1	1			1	1		
COCR	-	- -	-	-	5		2		2	4		
MOBO		+ +	x	x	5	2			2	3		

X=singing male; .-=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

PAGE 2

server's TA Date 142 Yr. 79 Time 0550 to 0610 Temp. 60 Cloud 2
initials. 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover 2

nd 2 Plot AA99 Visit 1 Area 30/31/32 Isola- 35/36 Border 37/38/39/40
22 No. 26/27/28 No. 29 (ha) tion Type

(PAGE # 2)

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 PAGE 1 of 2

Observer's TA Date 158 Yr. 79 Time 0910 to 0930 Temp. 71 Cloud
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 1 Plot A99 Visit 2 Area Isola- Border
 22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
COGR	≡	≡	≡ ≡	≡	16		6		6	4		
EWPF	x	x		x	3	1			1	3		
SCA	x	x	x	x	4	1			1	4		
TUTI	x	x	x	x	6	2			2	4		
RBWO	x	x	x		3	1			1	3		
WOTH	-	-		x	6	2	1		3	4		
STAR	-				1		1		1	1		
CARD	x ⊖	x	-	x x x x	9	2	1		3	4		1
CACH	=	=	=	=	8		2		2	4		
AMRO	-	-	=		5		2		2	3		
55FL		outside			☆							

PAGE. 2

nd 1 Plot A99 Visit 2 Area 30/31/32 Island 35/36 Type 37/38/39/40
22 No. 26/27/28 No. 29 (ha)

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 PAGE 1 OF 2

Observer's TA Date 166 Yr. 79 Time 05 23 to 05 43 Temp. 57 Cloud 0
 initials 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 ([°]C.) 16/17 cover
 and 2 Plot AA99 Visit 3 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

PHASE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
WATH	x ← IN? x ← OUT	x	x		3	1			1	3		
GRCA	out x	x		x	☆							
CARD	- x out	-	-	x	4		2		2	3		
CACH		x	x	x	4	1			1	4		
COGR	out W	-	=	outs	1		1		1	1		
COGR	W		-	W	1		1	4	5	1		
BLTA	-	⊖	⊕ Young was Fed	=	89		4		4	4	1	2 7
TUTI	out x	x out	x	x	☆							
MODO	out x				☆							
GCFL					2	1			1	2		
YBCU	x	x										
	out x	x			☆							

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

PAGE 2

server's TA Date 166 Yr. 79 Time 0523 to 0543 Temp. 57 Cloud 0
initials. 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 (⁶C.) 16/17 cover

ed 2 Plot AA 99 Visit 3 Area 30/31/32 Isola- 35/36 . Border 37/38/39/40
22 No. 26/27/28 No. 29 (ha) tion Type

[illegible]

X=singing males; -=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet #1 of 3

Observer's MH Date Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover
 initials. 1/2 (Julian) 3/4/5
 d 22 Plot AA104 Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40

Observer	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
GR CA					7-1-0 8 2.7 7	2-0-0 2 0.7 2	1-1-0 2 0.7 1	0	3-1-0 4 1.3 3	4-1-0 5 1.7 4	0	1-0-0 1 0.3 1
TY TI					2-2-1 5 1.7 2	1-1-1 3 1 1	0		1-1-1 3 1 1	2-2-1 5 1.7 2		0
SC TA					4-0-0 4 1.3 4	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	4-0-0 4 1.3 4		
RS TO					1-1-2 4 1.3 2	0-1-1 2 0.7 1	1-0-0 1 0.3 1		1-1-1 3 1 1	1-1-2 4 1.3 2		
CO YE					5-8-8 21 7 8	2-2-2 6 2 2	0		2-2-2 6 2 2	4-4-4 12 4 4		
AM RO					4-5-7 16 5.3 7	1-1-1 3 1 1	0-1-1 2 0.7 1		1-2-2 5 1.7 2	4-4-4 12 4 4		
RE VI					7-0-0 7 2.3 7	2-0-0 2 0.7 2	0		2-0-0 2 0.7 2	4-0-0 4 1.3 4		
CA RD					6-4-2 12 4 6	1-1-1 3 1 1	1-0-0 1 0.3 1		2-1-1 4 1.3 2	4-4-2 10 3.3 4	1-0-0 1 0.3 1	
CO CR					0	0	0	1-10-3 14 4.7 10	1-10-3 14 4.7 10	0	0	
SO SP					3-0-0 3 1 3	1-0-0 1 0.3 1	0	0	1-0-0 1 0.3 1	3-0-0 3 1 3	0	
BO BW					2-0-0 2 0.7 2	1-0-0 1 0.3 1	0	0	1-0-0 1 0.3 1	2-0-0 2 0.7 2	0	

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 2 of 3

Observer's initials 1/2 Date (Julian) 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover
 d 22 Plot No. AA104 Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40

HA E	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <5
	1	2	3	4								
CO BR					2-0-0 2 0.7 2	0	1-0-0 1 0.3 1	0-3-3 6 2 3	1-3-3 7 2.3 3	2-0-0 2 0.7 2	0	0
WO TH					4-1-0 5 1.7 4	1-1-0 2 0.7 1	1-0-0 1 0.3 1	0	2-1-0 3 1 2	3-1-0 4 1.3 3	0	
BL JA					2-2-8 12 4 8	0	1-1-4 6 2 4		1-1-4 6 2 4	2-2-4 8 2.7 4		
EW PE					1-2-3 6 2 3	1-1-1 3 1 1	0		1-1-1 3 1 1	1-2-3 6 2 3		
DO WO					0-5-0 5 1.7 5	0	0-2-0 2 0.7 2		0-2-0 2 0.7 2	0-4-0 4 1.3 4		
MO CH					0-3-2 5 1.7 3	0-1-1 2 0.7 1	0		0-1-1 2 0.7 1	0-3-2 5 1.7 3		
EA BL					0-1-0 1 0.3 1	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-1-0 1 0.3 1		
BL CR					0-2-0 2 0.7 2	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-2-0 2 0.7 2		
MO DO					0-1-0 1 0.3 1	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-1-0 1 0.3 1		
FI SP					0-2-1 3 1 2	0-1-1 2 0.7 1	0		0-1-1 2 0.7 1	0-2-1 3 1 2		
FI CR					0	0	0	0-1-0 1 0.3 1	0-1-0 1 0.3 1	0		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
Sheet # 3013

Observer's Date Yr. 79 Time to Temp. Cloud
Initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 ($^{\circ}\text{C.}$) 16/17 cover

	Plot	Visit	Area	Isola-	Border
	No.	No.	(ha)	tion	Type
d	22	26/27/28	29	30/31/32	35/36
					37/38/39/40

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's MH Date 153 Yr. 79 Time 0909 to 0929 Temp. 70 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 2 Plot AA104 Visit 1 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
CA TB	x	x	x	x	7	2	1		3	4		1
TH 12	x			x	2	1			1	2		
SC 7A	x	x	x	x	4	1			1	4		
AS TD					1		1		1	1		
YE LL	x	x	x	x	5	2			2	4		
AM RD	x	x	x	x	4	1			1	4		
RE V2	x	x	x	x	7	2			2	4		
CA RD	x		x	x	8	1	1		2	4	1	
AM CR					2		1		1	2		
SO SP	x	x		x	3	1			1	3		
BO BW		x		x	2	1			1	2		

X=singing males; -=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

P45c1

server's MH Date 164 Yr. 79 Time 0636 to 0656 Temp. 59 Cloud 1
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 2 Plot A104 Visit 2 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 tion 37/38/39/40 Type

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
CA RA	x	-	-	-	4	1			1	4		
YE LV	x	x	x	x	8	2			2	4		
CO GR	lv	v		v				3	3			
DO LO	-	-	-	-	5		2		2	4		
AS TO	x				1	1			1	1		
AM RO	-	x	x	x	5	1	1		2	4		
MO CH	x		x	x	3	1			1	3		
EA BL	x				1	1			1	1		
BL GR	x		x		2	1			1	2		
MO PO	x?				1	1			1	1		
EA PE		x		x	2	1			1	2		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Page 1

Observer's MH Date 176 Yr. 79 Time 0746 to 0804 Temp. ⁵⁷₆ (°C.) 16/17 Cloud 0
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15
 and 1 Plot AA104 Visit 3 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 tion 37/38/39/40 Type Noisy

P- PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-61 Σ adult <50
	1	2	3	4								
RB WO	-	-	-	-	4		1		1	4		
YB CA	x	x		x	4	2			2	3		
RS TD	x			-	2	1			1	2		
AM CA	x			✓				3	3			
YE VL	x	x	x	x	8	2			2	4		
CA RD	x	x			2	1			1	2		
CO FL	-	-	-		3		1		1	3		
AM RD	x	x	-	x	7	1	1		2	4		
BL JA	-	-	-	-	8		4		4	4		
YB CH	x	x		x	3	1			1	3		
EA PE		x	x	x	3	1			1	3		

Page 2

nd 22 Plot AA 104 Visit 3 Area 30/31/32 Isola- 35/36 Border 37/38/39/40
No. 26/27/28 No. 29 (ha) tion Type

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 103

Observer's MH Date 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. ($^{\circ}$ C.) 16/17 Cloud cover
 Initials. 1/2 (Julian) 3/4/5
 d 22 Plot AA106 Visit 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40
 No. 26/27/28 No. 29

Observer	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
OV EM					3-3-3 9 3 3	1-1-1 3 1 1	0	0	1-1-1 3 1 1	3-3-3 9 3 3	0	0
EW PE					4-4-0 8 2.7 4	1-1-0 2 0.7 1	0		1-1-0 2 0.7 1	4-4-0 8 2.7 4		
CA RD					3-0-0 3 1 3	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	3-0-0 3 1 3		
RS TO					2-0-3 5 1.7 3	1-0-0 1 0.3 1	1-0-1 2 0.7 1		2-0-1 3 1 2	2-0-3 5 1.7 3		
BL JA					3-3-2 8 2.7 3	0	2-1-2 5 1.7 2		2-1-2 5 1.7 2	3-3-2 8 2.7 3		
TH TI					1-3-3 7 2.3 3	1-1-1 3 1 1	0		1-1-1 3 1 1	1-3-3 7 2.3 3		
RE VI					5-0-0 14 4.7 9	2-4-0 6 2 4	0		2-4-0 6 2 4	4-4-0 8 2.7 4		
MO CH					6-0-0 6 2 6	2-0-0 2 0.7 2	0		2-0-0 2 0.7 2	4-0-0 4 1.3 4		
CA CH					4-1-8 13 4.3 8	0-0-2 2 0.7 2	1-1-2 4 1.3 2		1-1-4 6 2 4	4-1-4 9 3 4		
LO CR					3-0-0 3 1 3	0	1-0-0 1 0.3 1	2-2-3 7 2.3 3	3-2-3 8 2.7 3	4-0-0 4 1.3 4		
BH CO					5-1-0 6 2 5	0	2-1-0 3 1 2	0	2-1-0 3 1 2	4-1-0 5 1.7 4		

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 2 of 3

Observer's Date Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover
 initials. 1/2 (Julian) 3/4/5
 d 22 Plot AA104 Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40

HA E	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
GR CA					2-0-4 6 2 4	0-0-1 1 0.3 1	2-0-0 2 0.7 2	0	2-0-1 3 1 2	1-0-4 5 1.7 4	0	0
CO GR					0	0	0	4-0-0 4 1.3 4	4-0-0 4 1.3 4	0		
LD TH					3-2-1 6 2 3	1-1-0 2 0.7 1	0-0-1 1 0.3 1	0	1-1-1 3 1 1	3-2-1 6 2 3		
GL FL					2-1-0 3 1 2	0	1-1-0 2 0.7 1		1-1-0 2 0.7 1	2-1-0 3 1 2		
DO WD					2-2-1 5 1.7 2	0	1-1-1 3 1 1		1-1-1 3 1 1	2-2-1 5 1.7 2		
FI SR					0-3-0 3 1 3	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-3-0 3 1 3		
YB CH					0-3-0 3 1 3	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-3-0 3 1 3		
ST AR					0-1-0 1 0.3 1	0	0-1-0 1 0.3 1		0-1-0 1 0.3 1	0-1-0 1 0.3 1		0-1-0 1 0.3 1
TS FL					0-2-7 9 3 7	0	0-1-4 5 1.7 4		0-1-4 5 1.7 4	0-2-2 4 1.3 2		0-0-1
BO BW					0-1-0 1 0.3 1	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-1-0 1 0.3 1		
CA WR					0-1-0 1 0.3 1	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-1-0 1 0.3 1		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's MH Date 153 Yr. 79 Time 0841 to 0901 Temp. 71
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 Cloud 2
 and 2 Plot AA104 Visit 1 Area 30/31/32 Isola- 35/36 Border 37/38/39/40
22 No. 26/27/28 No. 29 tion Type

PHASE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50
	1	2	3	4								
OV EN	X	X	X		3	1			1	3		
EA PE	X	V	X	X	4	1			1	4		
CA RD	X	-	-		3	1			1	3		
AS TO	X		-		2	1	1		2	2		
BL JA	-		-	-	3		2		2	3		
TH TL	X				1	1			1	1		
RE VI	X	X	X	X	5	2			2	4		
MD CH	X	X	X	X	6	2			2	4		
CA CH	-	-	-	-	4		1		1	4		
AD CR	V	-	-	V	3		1	2	3	4		
BH CD	-	-	-	-	5		2		2	4		

X=singing males; -=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 Page 1

Observer's MH Date 164 Yr. 79 Time 0705 to 0725 Temp. 60
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (0 C.) 16/17 Cloud 1
 and 2 Plot A106 Visit 2 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P- PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-61 Σ adult <50
	1	2	3	4								
RE VI	x	x x x	x x	x x	9	4			4	4		
EA PE	x	x	x	x	4	1			1	4		
CA CH	-				1		1		1	1		
OV EN					3	1			1	3		
LO TH	x			x	2	1			1	2		
OL JA					3	1			1	3		
AM CR			v	v				2	2			
CO GR	v							1	1			
FI SP	y	x	x		3	1			1	3		
TH IL	y	y		x	3	1			1	3		
TB CH	x	x	y		3	1			1	3		

pg 2

nd

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

page 1

Observer's MH Date 176 Yr. 79 Time 0716 to 0736 Temp. 56 Cloud 0
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (6 C.) 16/17 cover

id 1 Plot AA/06 Visit 3 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 tion 37/38/39/40 Type noise

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
TY TI	x	x		x	3	1			1	3		
WB TH	-				1		1		1	1		
BL JA	-				2		2		2	2		
CA TB	x	x	x	x	4	1			1	4		
CA CA	- x	x	x	x	8	2	2		4	4		
OV EN	x	x		x	3	1			1	3		
AM RO	-		-	-	3		2		2	3		
AM CR	uv		v					3	3			
RS TO		-	-	-	3		1		1	3		
CO FL			-	-	7		4		4	2		1
DO WB				-	1		1		1	1		

page 2

nd

[illegible]

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 1 of 2

Observer's MH Date 3/4/5 Yr. 77 Time (start) 8/9/10/11 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover
 initials. 1/2 (Julian) 3/4/5
 d 22 Plot A439 Visit 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40
 No. 26/27/28 No. 29

HA E	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50
	1	2	3	4								
RE VI					15-14-21 50 16.7 21	5-4-6 15 5 6	0	0	5-4-6 15 5 6	4-4-4 12 4 4	0	01-0 1 0.3 1
YB GA					3-3-6 12 4 6	2-1-3 6 2 3	0		2-1-3 6 2 3	2-7-4 9 3 4		0
WO TH					5-2-2 9 3 5	1-1-1 3 1 1	1-0-0 1 0.3 1		2-1-1 4 1.3 2	4-2-2 8 2.7 4		0
CA RO					8-7-6 21 7 8	3-2-1 6 2 3	1-1-1 3 1 1		4-3-2 9 3 4	4-4-4 12 4 4		01-0 1 0.3 1
RB WO					4-1-1 6 2 4	0	2-1-1 4 1.3 2		2-1-1 4 1.3 2	3-1-1 5 1.7 3		0
EW TE					2-4-3 9 3 4	1-1-1 3 1 1	0		1-1-1 3 1 1	2-4-3 9 3 4		
CO LR					0	0	0	2-3-2 7 2.3 3	2-3-2 7 2.3 3	0		
TH TI					2-4-2 8 2.7 4	1-1-2 4 1.3 2	0	0	1-1-2 4 1.3 2	2-4-2 8 2.7 4		
BH CO					2-0-0 2 0.7 2	0	2-0-0 2 0.7 2	0	2-0-0 2 0.7 2	2-0-0 2 0.7 2		
GR CA					1-0-0 1 0.3 1	1-0-0 1 0.3 1	0	0	1-0-0 1 0.3 1	1-0-0 1 0.3 1		
BL JA					1-0-0 1 0.3 1	0	1-0-0 1 0.3 1	0	1-0-0 1 0.3 1	1-0-0 1 0.3 1		

Sheet # 2 of 2

Server's
Initials

HA
ECO
GAOL
E/

CA
CH

Do
in

SC
TA

50
51

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

page 1

Observer's MH Date 154 Yr. 79 Time 0847 to 0907 Temp. 62 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 rd 2 Plot A43a Visit 1 Area 30/31/32 Isola- 35/36 Border 37/38/39/40
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

PHASE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
ME VJ	X X	X	X X	X	15	5			5	4		
VB LW	X	X			3	2			2	2		
WO TH	-	X	X	X	5	1	1		2	4		
MO CA		X X	-	X	8	3	1		4	4		
RB WO	-	-	-		4		2		2	3		
LA PE					2	1			1	2		
AM CR	-	-	-	-	5		2	→	2	4		
TH TJ	X	X			2	1			1	2		
BY CO		-			2		2		2	2		
CA TB		X			1	1			1	1		
BL JA		-			1		1		1	1		

X=singing male; - =non-singing ad.; + =immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

server's MH Date 167 Yr. 79 Time 0703 to 0723 Temp. 64
initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 Cloud 2
cover
d 1 Plot A43 Visit 2 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 Type 37/38/39/40

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
DE VZ	x x	x x x	x x	x x x	14	4			4	4		1
TH TL	x	x	x	x	4	1			1	4		
EA PE	x	x	x	x	4	1			1	4		
AM CP		v v						3	3			
CA RD	⊖	x x	x x	x x	7	2	1		3	4		1
OV EV	x	x	x x	x x	7	3			3	4		
YB CU	x	x	x		3	1			1	3		
CA CU			x	-	2	1			1	2		
WO TG			x	x	2	1			1	2		
RB WO				-	1		1		1	1		

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET) page 1

Observer's MH Date 179 Yr. 79 Time 0637 to 0657 Temp. 60 Cloud 2
 initials 1/2 (Julian) 3/4/5 (start) 8/9/10/11 (12/13/14/15) (16/17) cover

and 0 Plot A430 Visit 3 Area Isolation Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
RE V	x	x	x	x	x	x			6	4		
YB LH	x	x		x					3	4		
AM CR								2	2			
DO WV							1		1	2		
TH FI	x			x		2	2		2	2		
CA CH		x				3	1		1	3		
EA DE	x	x	x			3	1		1	3		
SC TA	x	x		x		3	1		1	3		
CO RO						6	1	1	2	4		
BO OW						3	1		1	3		
OV EN						3	2		2	3		

page 2

server's
initials.

22

No.

NO.

(ha)

tion

Type

37/38/39/40

PHASE
DE

Co
Kl

60

X=singing males; --non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 1 of 2

Observer's MH Date 1/2 (Julian) 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. ($^{\circ}$ C.) 16/17 Cloud cover
 d 22 Plot A436 Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40

HA E	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
RE VI					16-19-16 51 17 19	4-5-5 14 4.7 5	0-1-0 1 0.3 1	0	4-6-5 15 5 6	4-4-4 12 4 4	0	0-2-0 2 0.7 2
WD TH					6-3-4 13 4.3 6	2-1-1 4 1.3 2	0	0	2-1-1 4 1.3 2	4-3-4 11 3.7 4		0
SC TA					4-2-6 12 4 6	1-1-2 9 1.3 2	0	0	1-1-2 4 1.3 2	4-2-4 10 3.3 4		
CO CR					2-0-0 2 0.7 2	0	1-0-0 1 0.3 1	0-1-2 3 1 2	1-1-2 4 1.3 2	2-0-0 2 0.7 2		
BH CO					2-0-0 2 0.7 2	0	1-0-0 1 0.3 1	0	1-0-0 1 0.3 1	2-0-0 2 0.7 2		
YB CY					1-4-3 8 2.7 4	1-3-2 6 2 3	0	0	1-3-2 6 2 3	1-3-3 7 2.3 3		
AL FL					4-0-5 4 3 5	1-0-2 3 1 2	1-0-0 1 0.3 1		2-0-2 4 1.3 2	3-0-3 6 2 3		
RS TO					1-0-0 1 0.3 1	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	1-0-0 1 0.3 1		
BL JA					2-0-1 3 1 2	0	1-0-1 2 0.7 1		1-0-1 2 0.7 1	2-0-1 3 1 2		
RB WD					1-4-0 5 1.7 4	0	1-2-0 3 1 2		1-2-0 3 1 2	1-3-0 4 1.3 3		
GC FL					1-0-0 1 0.3 1	0	1-0-0 1 0.3 1		1-0-0 1 0.3 1	1-0-0 1 0.3 1		

Sheet # 2 of 2

d	Plot	<u>A431</u>	Visit	Area	Isola-	Border
	No.	<u>26/27/28</u>	No.	<u>29</u>	tion	Type
				(ha)	<u>30/31/32</u>	<u>37/38/39/40</u>
	<u>22</u>				<u>35/36</u>	

[illegible]

X=singing male; -=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's MH Date 154 Yr. 79 Time 0805 to 0825 Temp. 66 Cloud
 initials 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 2 Plot A436 Visit 1 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
BE VS	x x	x x	x x	x x	16	4			4	4		
WO TB	x			x	6	2			2	4		
SL TB	x	x	x	x	4	1			1	4		
AM CR	-				2		1		1	2		
BA CO	-				2		1		1	2		
YB CN	x				1	1			1	1		
AC FL		x	x	x	4	1	1		2	3		
RS TD		x			1	1			1	1		
BL DB			-	-	2		1		1	2		
RB LD			-		1		1		1	1		
LC FL			-		1		1		1	1		

X=singing male; --=non-singing ad.; +=immature; V=flyover (LITTLE BIRDS SEEN WITHIN 50 FEET)

Server's MH Date 167 Yr. 79 Time 0735 to 0755 Temp. 63 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (⁶C.) 16/17 cover
 and 2 Plot A43⑥ Visit 2 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's MH Date 179 Yr. 79 Time 0600 to 0620 Temp. 59
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (6 C.) 16/17 Cloud 2
 and 0 Plot A436 Visit 3 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50
	1	2	3	4								
RE Y1	x	x	x	x	16	5			5	4		
SC SP	x	x	x	x	6	2			2	4		
WO TA			x	x	4	1			1	4		
AM CR								2	2			
BL JA					1		1		1	1		
YB CU				x	3	2			2	3		
OV EV	x		x	x	3	2			2	3		
CR RO		+	+		1	1			1	1	1	
RO RW			x	x	3	1			1	3		
RB WO					4		2		2	3		
AL FL		x	x	x	5	2			2	3		

X=singing males; --non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 10/2

Observer's MH Date 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. ($^{\circ}$ C.) 16/17 Cloud cover
 Initials. 1/2 (Julian) 3/4/5
 d 22 Plot A452 Visit 29 Area 44 Isolation 35/36 Border Type 37/38/39/40
 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

HA E	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-6 Σ adult <50
	1	2	3	4								
CO CR					0	0	0	2-2-0 4 1.3 2	2-2-0 4 1.3 2	0	0	0
CA RD					3-1-1 5 1.7 3	2-1-1 4 1.3 2	0	0	2-1-1 4 1.3 2	2-1-1 4 1.3 2		0
EW PE					4-0-3 7 2.3 4	1-0-1 2 0.7 1	0		1-0-1 2 0.7 1	4-0-3 7 2.3 4		0
GL FL					6-1-1 8 2.7 6	0	2-1-1 4 1.3 2		2-1-1 4 1.3 2	4-1-1 6 2 4		1-0-0 1 0.3 1
PE VI					7-6-13 26 8.7 13	3-3-4 11 3.7 4	0		3-3-4 10 3.3 4	4-4-4 12 4 4		0
AL FL					3-0-0 3 1 3	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	3-0-0 3 1 3		
WO TH					6-7-4 17 5.7 7	2-2-1 5 1.7 2	0-1-0 1 0.3 1		2-3-1 6 2 3	4-7-4 12 4 4		
BL JA					5-3-0 8 2.7 5	0	2-1-0 3 1 2		2-1-0 3 1 2	4-3-0 7 2.3 4		
SL TA					3-3-9 15 5 9	1-1-2 4 1.3 2	0-0-1 1 0.3 1		1-1-3 5 1.7 3	3-3-4 10 3.3 4		
CO GR					3-0-0 3 1 3	0	3-0-0 3 1 3		3-0-0 3 1 3	2-0-0 2 0.7 2		
CO YE					3-0-0 3 1 3	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	3-0-0 3 1 3		

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 2012

Observer's Date Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover
 initials. 1/2 (Julian) 3/4/5
 d 22 Plot A452 Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40

Observer	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-61 Σ adult <50
	1	2	3	4								
YB CH					3-2-2 7 2.3 3	1-1-1 3 1 1	0	0	1-1-1 3 1 1	3-2-2 7 2.3 3	0	0-1-0 1 2.3 1
OV EN					1-2-7 10 3.3 7	1-1-2 4 1.3 2	0		1-1-2 4 1.3 2	1-2-4 7 2.3 4		0-1-0 1 2.3 1
RS WD					1-6-0 7 2.3 6	0	1-2-0 3 1 2		1-2-0 3 1 2	1-4-0 5 1.7 4		0
TH TI					0-5-4 9 3 5	0-2-2 4 1.3 2	0		0-2-2 4 1.3 2	0-4-3 7 2.3 4		
RS TO					0-2-0 2 0.7 2	0	0-1-0 1 0.3 1		0-1-0 1 0.3 1	0-2-0 2 0.7 2		
BA SW					0	0	0	0-2-0 2 0.7 2	0-2-0 2 0.7 2	0		
DO WD					0-1-0 1 0.3 1	0	0-1-0 1 0.3 1	0	0-1-0 1 0.3 1	0-1-0 1 0.3 1		
AM RO					0-1-1 2 0.7 1	0	0-1-1 2 0.7 1		0-1-1 2 0.7 1	0-1-1 2 0.7 1		
YS FL					0-1-0 1 0.3 1	0	0-1-0 1 0.3 1		0-1-0 1 0.3 1	0-1-0 1 0.3 1		
CA CH					0-0-4 4 1.3 4	0-0-1 1 0.3 1	0-0-1 1 0.3 1		0-0-2 2 0.7 2	0-0-3 3 1 3		

X=singing males; - = non-singing ad.; + = immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

page 1

Observer's MH Date 153 Yr. 79 Time 0730 to 0750 Temp. 67 Cloud 2
 initials 1/2 (Julian) 3/4/5 (start) 8/9/10/11 (°C.) 16/17 cover
 and 3 Plot A45 9 Visit 1 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 tion Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
AM CR					3		2 →		2	2		
CA RD	X X	X			3	2			2	2		
EA DE	X	X	X	X	4	1			1	4		
GL FL	- -	⊖	-	-	6		2		2	4		1
RE VS	X	X	X	X	7	3			3	4		
AL FL	X	X	X		3	1			1	3		
LO TH			X	X	6	2			2	4		
BL JA	-	-	=	-	5		2		2	4		
SE TA		X	X	X	3	1			1	3		
CO GR				-	3		3		3	2		
YE LL		X	X	X	3	1			1	3		

1750 2

22	Plot No. <u>A 459</u> <u>26/27/28</u>	Visit No. <u>29</u>	Area (ha) <u>30/31/32</u>	Isolation <u>35/36</u>	Border Type <u>37/38/39/40</u>
----	--	---------------------	---------------------------	------------------------	--------------------------------

[illegible]

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET) P951

server's MH Date 164 Yr. 79 Time 0816 to 0830 Temp. 62 Cloud 0
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 4 Plot A45 Visit 2 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
AM CA	V	VV	V						2	2		
TH TI			X	X	5	2			2	4		
SC IA					3	1			1	3		
RS TO	-			-	2		1		1	2		
BA SW	VV							2	2			
BL JA	-		-	-	3		1		1	3		
DO WO	-				1		1		1	1		
YB CH				⊙	2	1			1	2		1
RE VE	X	X	X		6	3			3	4		
RB WO	-	-	-	-	6		2		2	4		
VO TH		X	X	X	7	2	1		3	4		

Page 2

nd 22 Plot A45⑥ Visit 2 Area 30/31/32 Isola- 35/36 Border 37/38/39/40
No. 26/27/28 No. 29 (ha) tion Type

[illegible]

X=singing males; -=non-singing ad.; +=immature; V=flyover (CIRCLE birds SEEN WITHIN 50 FEET)

Observer's MH Date 176 Yr. 79 Time 0603 to 0623 Temp. 50 Cloud
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 0 Plot A450 Visit 3 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
SL TA	x x	x x	x x	x x	9	2	1		3	4		
EA PE	x	x		x	3	1			1	3		
WO TA	x	x	x	x	4	1			1	4		
RE VI	x x	x	x x	x x	13	4			4	4		
OV EN	x	x	x	x	7	2			2	4		
CA CA	x	-		-	4	1	1		2	3		
TH TI	x	x	x		4	2			2	3		
AM AD					1		1		1	1		
GL FL					1		1		1	1		
YB CY			x	x	2	1			1	2		
CA AD				x	1	1			1	1		

X=singing males; -non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet #1042

Observer's MH Date 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. ($^{\circ}$ C.) 16/17 Cloud cover
 Initials 1/2 (Julian) 3/4/5
 d 22 Plot A456 Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40

HA E	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
RE VI					11-8-9 29 9.3 11	4-3-4 11 3.7 4	0	0	4-3-4 11 3.7 4	4-4-4 12 4 4	0	0
EW PE					7-4-4 15 5 7	2-1-1 4 1.3 2	0	0	2-1-1 4 1.3 2	4-4-4 12 4 4	0	0
CO GR					2-0-0 2 0.7 2	0	1-0-0 1 0.3 1	0-0-2 2 0.7 2	1-0-2 3 1 2	2-0-0 2 0.7 2	0	0
WD TH					5-6-4 15 5 6	2-2-1 5 1.3 2	0-1-1 2 0.7 1	0	2-3-2 7 2.3 3	4-4-3 11 3.7 4	0	0-1-0 1 0.3 1
BH CD					1-0-0 1 0.3 1	0	1-0-0 1 0.3 1		1-0-0 1 0.3 1	1-0-0 1 0.3 1	0	0
GR CA					4-0-4 8 2.7 4	2-0-0 2 0.7 2	0-0-2 2 0.7 2		2-0-2 4 1.3 2	3-0-2 5 1.7 3	0-0-1 1 0.3 1	1-0-2 3 1 2
BL JA					7-7-3 17 5.7 7	0	3-2-1 6 2 3		3-2-1 6 2 3	4-4-3 11 3.7 4	0	0
TH TI					3-3-6 12 4 6	1-1-2 4 1.3 2	0-0-2 2 0.7 2		1-1-4 6 2 4	3-3-4 10 3.3 4		0-0-2 2 0.7 2
RS TD					2-0-5 7 2.3 5	1-0-1 2 0.7 1	0-0-1 1 0.3 1		1-0-2 3 1 2	2-0-4 6 2 4		0
AM RD					7-1-4 12 4 7	2-1-0 3 1 2	1-0-2 3 1 2		3-1-2 6 2 3	4-1-4 9 3 4		1-0-0 1 0.3 1
GL FL					4-6-4 8 2.7 4	0	1-0-2 3 1 2		1-0-2 3 1 2	4-0-3 7 2.3 4		0

X=singing males; -non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 2012

Observer's initials 1/2 Date (Julian) 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. ($^{\circ}\text{C.}$) 16/17 Cloud cover
 d 22 Plot No. A456 Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40

HA E	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-6 Σ adult <5
	1	2	3	4								
CA RD					3-1-0 4 1.3 3	0	1-1-0 2 0.7 1	0	1-1-0 2 0.7 1	3-1-0 4 1.3 3	0	0
RB WD					2-6-3 11 3.7 6	0	1-2-3 6 2 3	0	1-2-3 6 2 3	2-4-2 8 2.7 4		
CO CR					2-0-1 3 1 2	0	1-0-1 2 0.7 1	0-0-1 1 0.3 1	1-0-2 3 1 2	2-0-1 3 1 2		
YB CH					0-2-3 5 1.7 3	0-1-1 2 0.7 1	0	0	0-1-1 2 0.7 1	0-2-3 5 1.7 3		
SC TA					0-2-1 3 1 2	0-0-1 1 0.3 1	0-1-0 1 0.3 1	0	0-1-1 2 0.7 1	0-2-1 3 1 2		
CA CH					0-6-12 18 6 12	0-1-2 3 1 2	0-1-2 3 1 2	0	0-2-4 6 2 4	0-4-4 8 2.7 4		0-0-2
OV EN					0-1-2 3 1 2	0-1-1 2 0.7 1	0	0	0-1-1 2 0.7 1	0-1-2 3 1 2		0
GB HE					0	0	0	0-1-0 1 0.3 1	0-1-0 1 0.3 1	0		
DO WD					0-0-3 3 1 3	0	0-0-2 2 0.7 2	0	0-0-2 2 0.7 2	0-0-3 3 1 3		
GC HA					0-0-4 4 1.3 4	0	0-0-2 2 0.7 2	0	0-0-0 2 0.7 2	0-0-3 3 1 3		

X=singing male; -=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

page 1

Observer's MH Date 153 Yr. 79 Time 0805 to 0825 Temp. 72
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (6 C.) 16/17 Cloud 2
 and 3 Plot A45b Visit 1 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 tion 35/36 Type 37/38/39/40

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
RE VA	X	X	X	X	11	4			4	4		
EA PE	X	X	X	X	7	2			2	4		
CO GR	-	-	-	-	2		1		1	2		
WO TH	X	X	X	X	5	2			2	4		
OH CO	-	-	-	-	1		1		1	1		
CA TB	X	X	X		4	2			2	3		1
BL JA	-	-	-	-	7		3		3	4		
TH TL	X	X	X	X	3	1			1	3		
RS TD	X	X			2	1			1	2		
AM RD	X	X	X	X	7	2	1		3	4		1
GL FL	-	-	-	-	4		1		1	4		

base 2

22	Plot No. <u>A456</u> <u>26/27/28</u>	Visit No. <u>1</u> <u>29</u>	Area (ha) <u>30/31/32</u>	Isolation <u>35/36</u>	Border Type <u>37/38/39/40</u>
----	---	---------------------------------	---------------------------	------------------------	--------------------------------

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

page 1

Observer's MH Date 164 Yr. 79 Time 0739 to 0759 Temp. 61 Cloud 1
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover

and 4 Plot A45(6) Visit 2 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-61 Σ adults <50
	1	2	3	4								
BL JP	=	=	-	=	7		2		2	4		
EA PE	x	x	x	x	4	1			1	4		
TH TE	x			x	3	1			1	3		
WO TH	x	x	x	x	6	2	1		3	4		1
YB GU	x		x		2	1			1	2		
BE VI	x	x	x	x	8	3			3	4		
BO WO	-	-	-	-	6		2		2	4		
AM RO	x				1	1			1	1		
SC TA	-		-		2		1		1	2		
CA CH	-	x	x	=	6	1	1		2	4		
OV EN		x			1	1			1	1		

mc2

nd

PHAD
DE

GO
HE

CA
AD

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

page 1

Observer's MH Date 176 Yr. 79 Time 0641 to 0701 Temp. 51 Cloud 0
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 1 Plot A45(6) Visit 3 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

PHASE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
RE VL	x	x	x	x	9	4			4	4		
AM AD	-	-	-	-	4		2		2	4		
BL JD	-	-	-	-	3		1		1	3		
RB WD	-	-	-	-	3		3		3	2		
CO GR	V							2	2			
AM CR	-	V			1		1	1	2	1		
YB LU	x		x	x	3	1			1	3		
CA TB	⊙ ⊙	⊙			5		2		2	2	1	2
WD TA	-	-	-	x	4	1	1		2	3		
EA FE	x	x	x	x	4	1			1	4		
AS TO	=	x	x	-	5	1	1		2	4		

Page 2

rd	Plot	Visit	Area	Isola-	Border
	No.	No.	(ha)	tion	Type
22	A45(6) 26/27/28	29	30/31/32	35/36	37/38/39/40

[illegible]

X=singing males; --non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
Sheet # 10+2

Observer's MH Date 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. ($^{\circ}$ C.) 16/17 Cloud cover

Plot A46 2 Visit 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40
No. 26/27/28

HA E	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-6 Σ adul <50
	1	2	3	4								
RE VI					11-14-17 48 16 17	5-4-6 15 5 6	1-0-0 1 0.3 1	0	6-4-6 16 5.3 6	4-4-4 12 4 4	0	1-0-0 1 0.3 1
HO WA					1-2-0 3 1 2	1-1-0 2 0.7 1	0		1-1-0 2 0.7 1	1-2-0 3 1 2		0
RB YR					11-10-3 24 8 11	0	3-4-2 9 3 4		3-4-2 9 3 4	4-4-3 11 3.7 4		0
EW PE					4-3-1 8 3.7 4	2-1-1 4 1.3 2	0		2-1-1 4 1.3 2	4-3-1 8 2.7 4		1-0-0 1 0.3 1
TH TI					4-6-2 12 4 6	1-2-1 4 1.3 2	0		1-2-1 4 1.3 2	4-4-2 10 3.3 4		0
AC FL					4-10-8 22 7.3 16	1-3-3 7 2.3 3	0		1-3-3 7 2.3 3	4-4-4 12 4 4		
WO TH					5-6-6 17 5.7 6	1-2-2 5 1.7 2	1-0-0 1 0.3 1		2-2-2 6 2 2	3-4-4 11 3.9 4		
CA RO					8-3-11 22 7.3 11	2-1-2 5 1.7 2	0-0-2 2 0.7 2		2-1-4 7 2.3 4	4-3-4 11 3.7 4		
CO CR					0	0	0	1-3-1 5 1.7 3	1-3-1 5 1.7 3	0		
DO WO					2-3-0 5 1.7 3	0	1-2-0 3 1 2	0	1-2-0 3 1 2	2-2-0 4 1.3 2		
CO GR					0	0	0	1-0-0 1 0.3 1	1-0-0 1 0.3 1	0		

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 Sheet # 2 of 2

Observer's Date Yr. 79 Time to Temp. Cloud
 initials 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 d Plot A469 Visit Area Isola- Border
 22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

Observer	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
HE WA					1-4-3 8 2.7 4	1-2-1 4 1.3 2	0	0	1-2-1 4 1.3 2	1-4-3 8 2.7 4	0	0
BL JA					2-0-0 2 0.7 2	0	1-0-0 1 0.3 1		1-0-0 1 0.3 1	2-0-0 2 0.7 2		
BB BN					1-0-1 2 0.7 1	0	1-0-1 2 0.7 1		1-0-1 2 0.7 1	1-0-1 2 0.7 1		
YB CH					0-3-5 8 2.7 5	0-2-3 5 1.7 3	0		0-2-3 5 1.7 3	0-3-3 6 2 3		
MO PD					0-1-0 1 0.3 1	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-1-0 1 0.3 1		
RW BL					0-1-0 1 0.3 1	0	0-1-0 1 0.3 1		0-1-0 1 0.3 1	0-1-0 1 0.3 1		
CA CH					0-1-0 1 0.3 1	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-1-0 1 0.3 1		
BA OW					0	0	0		0	0	0-1-0 1 0.3 1	
OV EN					0-0-1 1 0.3 1	0	0-0-1 1 0.3 1		0-0-1 1 0.3 1	0-0-1 1 0.3 1	0	0-0-1 1 0.3 1
NO PA					0-0-1 1 0.3 1	0-0-1 1 0.3 1	0		0-0-1 1 0.3 1	0-0-1 1 0.3 1	0	0

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

page 1

Observer's MH Date 153 Yr. 79 Time 0950 to 1610 Temp. 16 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 ed 1 Plot A46(a) Visit 1 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

PHA SE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
RC VZ	X X X	X X X	X X X X	X X X	17	5	1		6	4		1
HD WA	X				1	1			1	1		
RD WD	-	-	-	-	11		3		3	4		
EA PE	X	X	X	⊙	4	2			2	4		1
TH TZ	X	X	X	X	4	1			1	4		
AL FL	X	X	X	X	4	1			1	4		
LD TA	X	X		X	5	1	1		2	3		
CA RD	X X X	X X	X X	X X	8	2			2	4		
AM LR	-	-			2		1 →		1	2		
DO WO	-				2		1		1	2		
CO GR	V							1	1			

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Page 1

server's MH Date 167 Yr. 79 Time 0619 to 0639 Temp. 63 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 nd 1 Plot A46(2) Visit 2 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 tion Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
AE V3	x x x	x x	x x	x x	14	4			4	4		
AE FL	x x	x	x	x	10	3			3	4		
HE WA	x	x	x	x	4	2			2	4		
DE WD	-	-	-	-	10		4		4	4		
AM CR	v	v	v	v				3	3			
TH T2	-	x	x	x	6	2			2	4		
WD TH	x	x	x	x	6	2			2	4		
CA AD	x	x	x		3	1			1	3		
EA FE	x	x	x		3	1			1	3		
HO WA	x	x			2	1			1	2		
PO WD	-			-	3		2		2	2		

X=singing male; -non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet #1 of 2

Observer's MH Date 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover
 initials. 1/2 (Julian) 3/4/5
 d 22 Plot A 46 b Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40

Observer	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
RB WD					2-0-0 2 0.7 2	0	1-0-0 1 0.3 1	0	1-0-0 1 0.3 1	2-0-0 2 0.7 2	0	0
CA RD					9-3-5 17 5.7 9	2-1-2 5 1.7 2	2-0-1 3 1 2	0	4-1-3 8 2.7 4	4-3-3 10 3.3 4		1-0-0 1 0.3 1
OV EN					5-3-6 14 4.7 6	2-1-3 6 2 3	0	0	2-1-3 6 2 3	4-3-3 10 3.3 4		0
RE VI					13-14-12 39 13 14	4-4-4 12 4 4	0	0	4-4-4 12 4 4	4-4-4 12 4 4		0
CO CR					0	0	0	2-2-2 6 2 2	2-2-2 6 2 2	0		0
AC FL					6-3-5 14 4.7 6	2-1-2 5 1.7 2	0	0	2-1-2 5 1.7 2	4-3-4 11 3.7 4		0-1-0 1 0.3 1
DO WD					1-4-0 5 1.7 4	0	1-1-0 2 0.7 1	0	1-1-0 2 0.7 1	1-4-0 5 1.7 4		0
CO YE					3-0-0 3 1 3	2-0-0 2 0.7 2	0	0	2-0-0 2 0.7 2	3-0-0 3 1 3		0
MO DO					1-0-0 1 0.3 1	1-0-0 1 0.3 1	0	0	1-0-0 1 0.3 1	1-0-0 1 0.3 1		0
IN BY					5-0-2 7 2.3 5	2-0-1 3 1 2	0	0	2-0-1 3 1 2	2-0-2 5 1.7 3		0
CO GR					0	0	0	2-0-0 2 0.7 2	2-0-0 2 0.7 2	0		0

X=singing males; --non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 2012

Observer's Date Yr. 79 Time to Temp. Cloud
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 d Plot A46 Visit Area Isola- Border
 22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

HA E	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
BO BW					1-0-1 2 0.7 1	1-0-1 2 0.7 1	0	0	1-0-1 2 0.7 1	1-0-1 2 0.7 1	0	0
SC TA					0-3-0 3 1 3	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-3-0 3 1 3		
YB CH					0-3-2 5 1.7 3	0-1-1 2 0.7 1	0		0-1-1 2 0.7 1	0-3-2 5 1.7 3		
CA CH					0-1-1 2 0.7 1	0-0-1 1 0.3 1	0-1-0 1 0.3 1		0-1-1 2 0.7 1	0-1-1 2 0.7 1		
EW PE					0-0-5 5 1.7 5	0-0-2 2 0.7 2	0		0-0-2 2 0.7 2	0-0-4 4 1.3 4		
WO TH					0-0-3 3 1 3	0-0-2 2 0.7 2	0-0-1 1 0.3 1		0-0-3 3 1 3	0-0-3 3 1 3		
AM RO					0-0-1 1 0.3 1	0	0-0-1 1 0.3 1		0-0-1 1 0.3 1	0-0-1 1 0.3 1		
MO CH					0-0-1 1 0.3 1	0-0-1 1 0.3 1	0		0-0-1 1 0.3 1	0-0-1 1 0.3 1		
YB CH					0-0-2 2 0.7 2	0-0-1 1 0.3 1	0		0-0-1 1 0.3 1	0-0-2 2 0.7 2		
TY TI					0-0-1 1 0.3 1	0	0-0-1 1 0.3 1		0-0-1 1 0.3 1	0-0-1 1 0.3 1		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

page 1

Observer's MH Date 154 Yr. 79 Time 0640 to 0700 Temp. 65 Cloud 2
 initials. 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 (0 C.) 16/17 cover
 and 3 Plot A460 Visit 1 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 tion 35/36 Type 37/38/39/40

Observer	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
AB WB	-	-			2		1		1	2		
NU CR	x	x			9	2	2		4	4		1
OV EN	x y	x	x	x	5	2			2	4		
RE UL	xy	xx	xx	xx	13	4			4	4		
AM CR	-	=	=	=	7		2 →		2	4		
AL FL	y	-	x	x	6	2			2	4		
DO WO	-				1		1		1	1		
YE LL		x			3	2			2	3		
MO DO		x			1	1			1	1		
IN BU		x	x	x	5	2			2	3		
CO GR		v		v				2	2			

page 2

22	Plot No. <u>A46①</u> <u>26/27/28</u>	Visit No. <u>29</u>	Area (ha) <u>30/31/32</u>	Isolation <u>35/36</u>	Border Type <u>37/38/39/40</u>
----	---	---------------------	---------------------------	------------------------	--------------------------------

[illegible]

X=singing male; --=non-singing ad-; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

server's MH Date 167 Yr. 79 Time 0850 to 0910 Temp. Cloud 1
initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover

nd 3 Plot A46⑥ Visit 2 Area 30/31/32 Isola- 35/36 Border 37/38/39/40
22 No. 26/27/28 No. 29 (ha) tion Type

[illegible]

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's MH Date 179 Yr. 79 Time 0715 to 0735 Temp. 62
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 Cloud 2
 and 0 Plot A46B Visit 3 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-6 Σ adult <50
	1	2	3	4								
RE V3	X X X	X X	X X	X X X	12	4			4	4		
AL PL		X X	-	X	5	2			2	4		
OV EV	X	X X		X X X	6	3			3	3		
IN BN					2	1			1	2		
AM CR								2	2			
ED PE		X	X	X	5	2			2	4		
YB CH	X		X		2	1			1	2		
WD TA	X			-	3	2	1		3	3		
AM AD					1		1		1	1		
CA BO				X	5	2	1		3	3		
BO AW					1	1			1	1		

X=singing male; -=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

server's Date Yr. Time to Temp. Cloud
initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover

nd 22 Plot A464 Visit 3 Area 30/31/32 Isola- 35/36 Border 37/38/39/40
No. 26/27/28 No. 29 (ha) tion Type

[illegible]

X=singing male; -non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 Sheet # 1012

Observer's MA Date 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. 16/17 Cloud cover
 initials. 1/2 (Julian) 3/4/5 6/7
 d 22 Plot A46 Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40

HA E	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-6 Σ adul <50
	1	2	3	4								
YB CH					2-3-2 7 2.3 3	1-2-2 5 1.7 2	0	0	1-2-2 5 1.7 2	2-3-1 6 2 3	0	0
RE VI					12-14-17 43 14.3 17	4-4-5 13 4.3 5	0		4-4-5 13 4.3 5	4-4-4 12 4 4		
WO TH					2-9-5 21 7 9	2-2-2 6 2 2	0-1-0 1 0.3 1		2-3-2 7 2.3 3	4-4-4 12 4 4		
HE WA					3-1-2 6 2 3	1-1-1 3 1 1	0		1-1-1 3 1 1	3-1-2 6 2 3		
HO WA					3-4-4 11 3.7 4	2-2-1 5 1.7 2	0		2-2-1 5 1.7 2	3-3-4 10 3.3 4		
CA RD					10-5-4 19 6.3 10	2-1-1 4 1.3 3	1-1-1 3 1 1		3-2-2 7 2.3 3	4-4-3 11 3.7 4		
OV EV					4-4-4 12 4 4	2-1-1 4 1.3 2	0		2-1-1 4 1.3 2	3-4-4 11 3.7 4		
CA CH					2-4-2 8 2.7 4	1-1-1 3 1 1	0		1-1-1 3 1 1	2-4-2 8 2.7 4		
YB CH					1-1-0 2 0.7 1	1-1-0 2 0.7 1	0		1-1-0 2 0.7 1	1-1-0 2 0.7 1		
AC FL					4-7-5 16 8 7	1-3-2 6 2 3	0		1-3-2 6 2 3	4-4-4 12 4 4		
VE VI					1-0-0 1 0.3 1	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	1-0-0 1 0.3 1		

X=singing male; - = non-singing ad.; + = immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 2 of 2

Observer's Date Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover
 initials. 1/2 (Julian) 3/4/5
 d 22 Plot A46E Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40

HA E	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
CO CR					0	0	0	2-2-3 7 2.3 3	2-2-3 7 2.3 3	0	0	0
BB WD					1-10-8 19 6.3 10	0	1-4-2 7 2.3 4	0	1-4-2 7 2.3 4	1-4-4 9 3 4		
HA WD					1-0-0 1 0.3 1	0	1-0-0 1 0.3 1		1-0-0 1 0.3 1	1-0-0 1 0.3 1		
TH TL					2-2-2 6 2 2	1-1-1 3 1 1	0-0-1 1 0.3 1		1-1-2 4 1.3 2	2-2-1 5 1.7 2		
NO PA					0-3-3 6 2 3	0-1-1 2 0.7 1	0		0-1-1 2 0.7 1	0-3-3 6 2 3		
RT HY					0-2-0 2 0.7 2	0	0-2-0 2 0.7 2		0-2-0 2 0.7 2	0-2-0 2 0.7 2		
DO WD					0-2-4 6 2 4	0	0-1-2 3 1 2		0-1-2 3 1 2	0-2-4 6 2 4		
EW PE					0-1-3 4 1.3 3	0-1-1 2 0.7 1	0		0-1-1 2 0.7 1	0-1-3 4 1.3 3		
YS FL					0-1-0 1 0.3 1	0	0-1-0 1 0.3 1		0-1-0 1 0.3 1	0-1-0 1 0.3 1		
AM RD					0-0-2 2 0.7 2	0	0-0-1 1 0.3 1		0-0-1 1 0.3 1	0-0-2 2 0.7 2		
PT WD					0-0-1 1 0.3 1	0	0-0-1 1 0.3 1		0-0-1 1 0.3 1	0-0-1 1 0.3 1		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET) pisc 1

Observer's MH Date 154 Yr. 79 Time 0720 to 0740 Temp. 65
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 Cloud 2
 ed 2 Plot A460 Visit 1 Area 30/31/32 Isola- 35/36 Border 37/38/39/40
22 No. 26/27/28 No. 29 (ha)

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
VB CH	x	x			2	1			1	2		
RE VJ	x x	x x	x x	x x	12	4			4	4		
LD TD	y	x x	x x	x x	7	2			2	4		
RG LD	x	x	x		3	1			1	3		
HU WJ	x	x x	x		3	2			2	3		
CA RD	x x	x x	x x	x x	10	2	1		3	4		
GV EW	x	x x	x		4	2			2	3		
CA CB	-			x	2	1			1	2		
YB CP	x				1	1			1	1		
AL PL	x	x	x	x	4	1			1	4		
WE VJ	x				1	1			1	1		

page 2

ed

[illegible]

X=singing male; -=non-singing ad.; +=immature; V=flyover (CIRCLE birds seen within 50 FEET)

page 1

Observer's MH Date 167 Yr. 79 Time 0815 to 0835 Temp. 16/17 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.)
 and 3 Plot A46 Visit 2 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
RE VJ	x x x x	x x x	x x x	x x x	14	4			4	4		
PA WA	x	x	x		3	1			1	3		
HO WA	x			x x	4	2			2	3		
WO TH	- x x	x x	- x x	x x	9	2	1		3	4		
RB WO	- --	- T	= -	= -	10		4		4	4		
AL FL	x x	x x x	x x x	x x	7	3			3	4		
AM CR								2	2			
LA RO		x -	x	x	5	1	1		2	4		
CA CH	x	x	x	x	4	1			1	4		
YB CA	x		x		3	2			2	3		
OV EN	x	x	x	x	4	1			1	4		

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's MH Date 179 Yr. 79 Time 0754 to 0814 Temp. 64 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover

nd 0 Plot A460 Visit 3 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 tion Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
AE WB	x x x	x x x	x x x	x x x	17	5			5	4		
AB WB	- -	- -	- -	- -	8		2		2	4		
AC FW	x	x	x x	x	5	2			2	4		
CA CB	x	x			2	1			1	2		
HO WB	x	x	x	x	4	1			1	4		
OV FW	x	x	x	x	4	1			1	4		
WO TH	x	x x	x x	x	5	2			2	4		
AM RU	-	-			2		1		1	2		
AM CR	v	v v						3	3			
IN TE	-				2	1	1		2	1		
DO WB	-	-	-		4		2		2	4		

pas 2

nd 22 Plot A46C Visit 3 Area 30/31/32 Isola- 35/36 Border 37/38/39/40
No. 26/27/28 No. 29 (ha) tion Type

[illegible]

X=singing male; -=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
sheet # 1 of 1

server's MH Date 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. ($^{\circ}\text{C.}$) 16/17 Cloud cover
initials. 1/2
nd 22 Plot A80p 9 Visit No. 29 Area (ha) 76 Isolation 35/36 Border Type 37/38/39/40
No. 26/27/28

[illegible]

X=singing male; - =non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Server's MH Date 158 Yr. 79 Time 0807 to 0827 Temp. 16/17 Cloud 2
Initials. 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover

Plot ASD Visit 2 Area 30/31/32 Isola- Border
No. 26/27/28 No. 29 (ha) 35/36 tion Type 37/38/39/40

[illegible]

X=singing male; -=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

server's MH Date 168 Yr. 79 Time 0617 to 0637 Temp. 64 Cloud 2
 initials. 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover

nd 3 Plot A80 @ Visit 3 Area 30/31/32 Isola- 35/36 Border 37/38/39/40
22 No. 26/27/28 No. 29 tion

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 1 of 2

Observer's MH Date 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. ($^{\circ}$ C.) 16/17 Cloud cover
 initials. 1/2 (Julian) 3/4/5 6/7
 and Plot A80p6 Visit Area 76 Isolation Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
OV EM					4-7-7 18 6 7	1-3-3 7 2.3 7	0	0	1-3-3 7 2.3 3	4-4-4 12 4 4	0	0
CO CR					7-0-0 7 2.3 7	0	3-0-0 3 1 3	2-4-4 10 3.3 4	5-4-4 13 4.3 5	4-0-0 4 1.3 4		
CA RD					2-0-3 5 1.7 3	1-0-1 2 0.7 1	0	0	1-0-1 2 0.7 1	2-0-3 5 1.7 3		
RS TO					4-0-3 7 2.3 4	1-0-1 2 0.7 1		0	1-0-1 2 0.7 1	4-0-3 7 2.3 4		
RE VI					5-4-4 13 4.3 5	2-1-1 4 1.3 2		0	2-1-1 4 1.3 2	4-4-4 12 4 4		
SC TA					4-4-5 13 4.3 5	1-1-2 4 1.3 2		0	1-1-2 4 1.3 2	4-4-4 12 4 4		
RW BL					0	0		1-0-0 1 0.3 1	1-0-0 1 0.3 1	0		
BA WW					2-0-1 3 1 2	1-0-1 2 0.7 1		0	1-0-1 2 0.7 1	2-0-1 3 1 2		
EW PE					1-0-0 1 0.3 1	1-0-0 1 0.3 1		0	1-0-0 1 0.3 1	1-0-0 1 0.3 1		
AM GO					0	0		1-0-0 1 0.3 1	1-0-0 1 0.3 1	0		
BL JA					0-3-2 5 1.7 3	0	0-1-1 2 0.7 1	0	0-1-1 2 0.7 1	0-3-2 5 1.7 3		

Sheet # 2 of 2

server's
initials. 1/2

Date
(Julian) 3/4/5

Yr. 79
6/7

Time: 8/9/10/11

to 12/13/14/15

Temp.
(°C.) 16/17

Cloud
cover

nd 22

Plot A80, 6
No. 26/27/23

Visit
No.

Area
(ha) 30/31/32

Isola-
tion 35/36

Border
Type 37/38/39/40

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's MH Date 145 Yr. 79 Time 0706 to 0726 Temp. 19 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover 2
 and 1 Plot A80p (6) Visit 1 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 tion 37/38/39/40 Type

SP. ALPHA CODE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
OV EM.	+	+	+	+	4	1			1	4		
B.B. War. (mis)	+	+	+	+	migrant							
Am Cr	-	-	-	-	7		3	2	5	4		
CA RD	+	+			2	1			1	2		
BS TO	+	+	+	+	4	1			1	4		
BE VI	+	+	+	+	5	2			2	4		
Sc Tg	+	+	+	+	4	1			1	4		
Bw BL		✓						1	1			
BA WW			+	+	2	1			1	2		
FA PE			+		1	1			1	1		
PS LO			✓					1	1			

X=singing male; -=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

server's MH Date 158 Yr. 79 Time 0841 to 0901 Temp. 75
initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (⁰C.) 16/17 Cloud
and 2 Plot A80.6 Visit 2 Area 30/31/32 Isola- . Border
22 No. 26/27/28 No. 29 (ha) 35/36 tion Type 37/38/39/40

[illegible]

X=singing males; -=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

page 1

Observer's MH Date 169 Yr. 79 Time 0614 to 0634 Temp. 64 Cloud/cover 16/17
 Initials. 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 (°C.)
 and 0 Plot A80 Visit 3 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
SC TA	X				5	2			2	4		
OV FN	X	X	X	X	7	3			3	4		
CA RO	X	X	X		3	1			1	3		
ME VI	X	X	X	X	4	1			1	4		
AM CR	V	V	V	V				4	4			
RS TD	X	X	X		3	1			1	3		
YE LL	X	X	X	X	4	1			1	4		
WD TA	-		X	X	3	1			1	3		
CO CA		V						1	1			
GC FL		-			2		2		2	2		
BA WW			X		1	1			1	1		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 Sheet #1042

Observer's TA Date 79 Yr. 6/7 Time (start) 8/9/10/11 to 12/13/14/15 Temp. ($^{\circ}\text{C.}$) 16/17 Cloud cover 2
 Initials. 1/2 (Julian) 3/4/5
 and 22 Plot A869 Visit 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40
 No. 26/27/28 No. 29

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults < 50
	1	2	3	4								
OV EN					7-2-9 18 6 9	3-2-3 8 2.7 3	0	0	3-2-3 8 2.7 3	4-2-4 10 3.3 4	0	0-0-1 1 0.3 1
SC TA					9-1-10 20 6.7 10	3-1-3 7 2.7 3	0		3-1-3 7 2.7 3	4-1-4 9 3 4		0
TY TI					6-8-7 21 7 8	2-2-2 6 2 2	0-0-1 1 0.3 1		2-2-3 7 2.3 3	4-4-4 12 4 4		
RE VI					8-10-8 26 8.7 10	2-3-3 8 2.7 3	0		2-3-3 8 2.7 3	4-4-4 12 4 4		
AL FL					2-0-0 2 0.7 2	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	2-0-0 2 0.7 2		
CO CR					3-2-3 8 2.7 3	0	1-1-2 4 1.3 2		1-1-2 4 1.3 2	3-2-3 8 2.7 3		
CA RD					1-4-2 7 2.3 4	1-1-1 3 1 1	0		1-1-1 3 1 1	1-4-2 7 2.3 4		
BL JA					3-0-4 7 2.3 4	0	3-0-2 5 1.7 3		3-0-2 5 1.7 3	2-0-4 6 2 4		
WO TH					1-4-1 6 2 4	1-1-1 3 1 1	0		1-1-1 3 1 1	1-4-1 6 2 4		
RS HA					0-1-0 1 0.3 1	0	0-1-0 1 0.3 1		0-1-0 1 0.3 1	0-1-0 1 0.3 1		
WE WA					0-2-1 3 1 2	0-0-1 1 0.3 1	0-1-0 1 0.3 1		0-1-1 2 0.7 1	0-2-1 3 1 2		0-1-0 1 0.3 1

X=singing male; .-=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

sheet # 2 of 2

Server's Date Yr. 79 Time to Temp. Cloud
 initials 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover 2

nd 22 Plot A869 Visit 29 Area 30/31/32 Isola- 35/36 . Border 37/38/39/40
No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Server's TA Date 157 Yr. 79 Time 0615 to 0635 Temp. 60 Cloud
Initials. 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 (^oC.) 16/17 cover

ed 0 Plot A86a Visit 1 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

PHASE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
OVEN	x	x	x x x	x x	7	3			3	4		
SCTA	x	x x	x x	x x x	9	3			3	4		
TUTI		x	x		6	2			2	4		
REVI	x x x	x x x	x x	x x x	8	2			2	4		
ACFL					2	1			1	2		
COSR					3		1		1	3		
CARD			x		1	1			1	1		
BLJA					3		3		3	2		
WOTH					1	1			1	1		

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's TA Date 171 Yr. 79 Time 0610 to 0630 Temp. 56 Cloud 0
 initials. 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 (⁰C.) 16/17 cover
 d 1 Plot A86a Visit 3 Area 30/31/32 Isola- 35/36 Border 37/38/39/40
22 No. 26/27/28 No. 29 (ha)

HA	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-61 Σ adults <50
	1	2	3	4								
TUTY			-	-	7	2	1		3	4		
SOTA	x	x	x	x	10	3			3	4		
COGR					3		2		2	3		
OVEN	x	x	x	x	9	3			3	4		1
REVI			x	x	8	3			3	4		
BLJA	-	-	-	-	4		2		2	4		
CARD	x	x			2	1			1	2		
WEWA			x		1	1			1	1		
COGR			V					1	1			
WOTH				x	1	1			1	1		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 1 of 2

Observer's TA Date 1/2 (Julian) 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. ($^{\circ}\text{C.}$) 16/17 Cloud cover 2
 and 22 Plot A86 6 Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
NE VI					8-13-12 33 11 13	2-3-3 8 2.7 3	0-1-0 1 0.3 1	0	2-4-3 9 3 4	4-4-4 12 4 4	0	0
NO PA					1-0-0 1 0.3 1	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	1-0-0 1 0.3 1		
HE WA					2-0-0 2 0.1 2	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	2-0-0 2 0.7 2		
BL JA					4-0-0 4 1.3 4	0	2-0-0 2 0.7 2		2-0-0 2 0.7 2	2-0-0 2 0.7 2		
OV EN					6-5-11 22 7.3 11	2-2-3 7 2.3 3	0		2-2-3 7 2.3 3	4-4-4 12 4 4		
YB CY					3-0-0 3 1 3	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	3-0-0 3 1 3		
CA WR					1-0-0 1 0.3 1	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	1-0-0 1 0.3 1		
AC FL					3-0-5 8 2.7 5	1-0-1 2 0.7 1	0-0-1 1 0.3 1		1-0-2 3 1 2	3-0-4 7 2.3 4		
TY TI					6-8-4 18 6 8	3-3-1 7 2.3 3	0		3-3-1 7 2.3 3	3-4-4 11 3.7 4		
WO TH					1-4-7 12 4 7	1-1-2 4 1.3 2	0		1-1-2 4 1.3 2	1-4-4 9 3 4		
CA RO					1-0-0 1 0.3 1	0	1-0-0 1 0.3 1		1-0-0 1 0.3 1	1-0-0 1 0.3 1		

Sheet # 2 of 2

22	Plot No.	A86 <u>6</u> 26/27/28	Visit No.	29	Area (ha)	30/31/32	Isola- tion	35/36	Border Type	37/38/39/40
----	-------------	--------------------------	--------------	----	--------------	----------	----------------	-------	----------------	-------------

[illegible]

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

PAGE 1 of 2

Observer's TA Date 157 Yr. 79 Time 0700 to 0720 Temp. 61 Cloud
Initials 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover

ed 0 Plot A866 Visit 1 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

SHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
REV	x	x	x	x	8	2			2	4		
NOVA	x	x	x	x	1	1			1	1		
KEVA	+	x			2	1			1	2		
BETA	=	=			4		2		2	2		
OVEN	x	x	x	x	6	2			2	4		
YBCU	x	x	x		3	1			1	3		
CAMP		x			1	1			1	1		
ACFL		x	x	x	3	1			1	3		
TUT1			x	x	6	3			3	3		
WATH			x		1	1			1	1		
CARD					1		1		1	1		

PAGE 2

ed	<u>0</u>	Plot	<u>A866</u>	Visit	<u>1</u>	Area	<u>30/31/32</u>	Isola-	<u>35/36</u>	Border	<u>37/38/39/40</u>
	<u>22</u>	No.	<u>26/27/28</u>	No.	<u>29</u>	(ha)		tion		Type	

[illegible]

X=singing males; --non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet # 1 of 3

Observer's TA Date Yr. 79 Time to Temp. Cloud
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover 2
 and Plot A86 E Visit Area 281 Isolation Border
 22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

Observer's initials	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
DO WD					7-0-2 9 3 7	3-0-1 4 1.3 3	0	0	3-0-1 4 1.3 3	4-0-2 6 2 4	0	0
CA RD					7-6-7 20 6.7 7	2-1-2 5 1.7 2	2-1-0 3 1 2		4-2-2 8 2.7 4	4-4-4 12 4 4		
AC FL					2-11-5 18 6 11	1-3-2 6 2 3	0		1-3-2 6 2 3	2-4-3 9 3 3		
HE WA					2-4-4 10 3.3 4	1-1-1 3 1 1	0		1-1-1 3 1 1	2-4-4 10 3.3 4		
WE VI					4-3-0 7 2.3 4	1-1-0 2 0.7 1	0		1-1-0 2 0.7 1	4-3-0 7 2.3 4		
YS FL					1-0-0 1 0.3 1	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	1-0-0 1 0.3 1		
CA CH					2-1-2 5 1.7 2	1-1-1 3 1 1	0		1-1-1 3 1 1	2-1-2 5 1.7 2		
SC TA					8-7-3 18 6 8	1-2-1 4 1.3 2	2-0-0 2 0.7 2		3-2-1 6 2 3	4-4-3 11 3.7 4		2-0-0 2 0.7 2
CO YE					8-4-8 20 6.7 8	2-1-2 5 1.7 2	0		2-1-2 5 1.7 2	4-4-4 12 4 4		0
EW PE					4-4-2 10 3.3 4	1-1-1 3 1 1	0		1-1-1 3 1 1	4-4-2 10 3.3 4		
WO TH					7-7-2 16 5.3 7	3-2-1 6 2 3	0		3-2-1 6 2 3	4-4-2 10 3.3 4		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 Sheet # 2043

Observer's Date Yr. 79 Time to Temp. Cloud
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover 2
 and Plot A86C Visit Area Isola- Border
 22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
TH TJ					1-5-4 10 3.3 5	1-2-1 4 1.3 2	0	0	1-2-1 4 1.3 2	1-4-4 9 3 4	0	0
IN BH					3-0-0 3 1 3	1-0-0 1 0.3 1			1-0-0 1 0.3 1	3-0-0 3 1 3		
NO PA					4-1-1 6 2 4	1-1-1 3 1 1			1-1-1 3 1 1	4-1-1 6 2 4		
HO WA					5-1-2 8 2.7 5	2-1-1 4 1.3 2			2-1-1 4 1.3 2	3-1-2 6 2 3		
RE VT					7-2-12 27 9 12	3-2-4 9 3 4			3-2-4 9 3 4	4-4-4 12 4 4		
OV EN					2-4-2 8 2.7 4	1-2-1 4 1.3 2			1-2-1 4 1.3 2	2-3-2 7 2.3 3		
RB WD					3-3-5 11 3.7 5	1-2-2 5 1.7 2	1-0-0 1 0.3 1		2-2-2 6 2 2	2-3-4 9 3 4		1-0-0 1 0.3 1
LO WA					1-1-0 2 0.7 1	1-1-0 2 0.7 1	0		1-1-0 2 0.7 1	1-1-0 2 0.7 1		0
WE WA					2-0-3 5 1.7 3	1-0-1 2 0.7 1			1-0-1 2 0.7 1	2-0-3 5 1.7 3		1-0-0 1 0.3 1
YT VI					1-0-0 1 0.3 1	1-0-0 1 0.3 1			1-0-0 1 0.3 1	1-0-0 1 0.3 1		0
YB CY					1-0-1 2 0.7 1	1-0-1 2 0.7 1			1-0-1 2 0.7 1	1-0-1 2 0.7 1		0

Sheet # 3 of 3

Plot No.	Visit No.	Area (ha)	Isolation	Border Type
22	29	30/31/32	35/36	37/38/39/40

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

PAGE 1 of 3

Observer's TA Date 157 Yr. 79 Time 0740 to 0800 Temp. 63 Cloud
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (⁰C.) 16/17 cover
 ed 0 Plot A 86C Visit 1 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 tion 35/36 Type 37/38/39/40

SHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
DOWN	x	x	x	x	7	3			3	4		
CARD	x	x	x	x	7	2	2		4	4		
ACFL	x	x			2	1			1	2		
KEVA	x		x		2	1			1	2		
WEVI	x	x	x	x	4	1			1	4		
COFL	x				1	1			1	1		
CHCH	x				2	1			1	2		
SCXA	x	(x)	(=)	(x)	8	1	2		3	4		2
COFE	x	+	x	x	8	2			2	4		
ELPE	x	x	x	x	4	1			1	4		
WOTH	x	x	x	x	7	3			3	4		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

PAGE 2 of 3

Observer's Initials: TA Date (Julian) 157 Yr. 79 Time (start) 0746 to 0800 Temp. (°C.) 53 Cloud cover 16/17

Plot No. 860 Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40

HA E	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
TUT	x				1	1			1	1		
WBU	x	x	x		3	1			1	3		
NOP	x	x	x	x	4	1			1	4		
HONA	x	x	x	x	5	2			2	3		
REVI	x	x	x	x	7	3			3	4		
OVEN		x		x	2	1			1	2		
REBU		x	x		3	1	1		2	2		
LONA		x			1	1			1	1		
WEWA		x	x		2	1			1	2		1
XTVI			x		1	1			1	1		
MOCK			x	x	*							

PAGE 3

rd 0 Plot A86C Visit 1 Area 30/31/32 Isola- 35/36 . Border 37/38/39/40
22 No. 26/27/28 No. 29 (ha) tion Type

[illegible]

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 PAGE 1 of 2

Observer's TA Date 165 Yr. 79 Time 0639 to 0659 Temp. 46 Cloud 0
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 1 Plot A86C Visit 2 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

PHAE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
COYE	x	x	x	x	4	1			1	4		
ACFL	x	x	x	x	11	3			3	4		
REVL	x	x	x	x	8	2			2	4		
KEWA	x	x	x	x	4	1			1	4		
SCTA	x	x	x	x	7	2			2	4		
CARD	x	x	x	x	6	1	1		2	4		
WOTH	x	x	x	x	7	2			2	4		
BGGN	-	-	-	-	3		1		1	3		
EWPE	x	x	x	x	4	1			1	4		
RBWD	x	x	x	x	3	2			2	3		
TUTI	x	x	x	x	5	2			2	4		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
PAGE 1 of 2

Observer's TA Date 171 Yr. 79 Time 0725 to 0745 Temp. 58 Cloud 0
 initials 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 d 0 Plot A260 Visit 3 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 Type 37/38/39/40

HA	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-61 Σ adults <50
	1	2	3	4								
COYE	x	x	x	x	8	2			2	4		
HOWA	x	x			2	1			1	2		
KEWA	x	x	x	x	4	1			1	4		
WEWA	x		x	x	3	1			1	3		
OVEN	x			x	2	1			1	2		
REVI	x	x	x	x	12	4			4	4		
MOCK	x				★							
ACFL	x			x	5	2			2	3		
CARD	x			x	7	2			2	4		
SCTA	x		x	x	3	1			1	3		
DOWO	x			x	2	1			1	2		

X=singing male; -non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

PAGE 2

Observer's Initials TA Date 171 Yr. 79 Time 0725 to 0745 Temp. 58 Cloud 0
 (Julian) 3/4/5 (start) 8/9/10/11 (6 C.) 16/17 cover
 d 0 Plot A 86c Visit 3 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 tion 35/36 Type 37/38/39/40

HA E	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-61 Σ adult <50
	1	2	3	4								
TUT	x	x		x	4	1			1	4		
WOTH	x				2	1			1	2		
BACW	V							1	1			
RBNW	x	x	x	x	5	2			2	4		
YBCU	x				1	1			1	1		
CACH	-	x			2	1			1	2		
AMGO		V						1	1			
EWPE				x	2	1			1	2		
WBNU				-	1		1		1	1		
NBPA				x	1	1			1	1		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet #1 of 2

Observer's TA Date 1/2 (Julian) 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover 2
 and 22 Plot A87p 9 Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
OV EN					10-6-10 26 8.7 10	3-2-4 9 3 4	0-1-0 1 0.3 1	○	3-3-4 10 3.3 4	4-3-4 11 3.7 4	○	0-1-0 1 0.3 1
RE VI					7-9-12 28 9.3 12	3-3-3 9 3 3	0-0-1 1 0.3 1	○	3-3-4 10 3.3 4	4-4-4 12 4 4		○
SC TA					4-6-4 14 4.7 6	1-2-1 4 1.3 2	○	○	1-2-1 4 1.3 2	4-4-4 12 4 4		
AL FL					5-5-11 21 7 11	2-2-3 7 2.3 3	○	○	2-2-3 7 2.3 3	4-4-4 12 4 4		
HO WA					6-4-4 14 4.7 6	2-2-1 5 1.7 2	○	○	2-2-1 5 1.7 2	4-3-4 11 3.7 4		
FI CR					○	○	○	1-0-0 1 0.3 1	1-0-0 1 0.3 1	○		
RB WD					1-0-0 1 0.3 1	○	1-0-0 1 0.3 1	○	1-0-0 1 0.3 1	1-0-0 1 0.3 1		
PI WD					1-0-0 1 0.3 1	1-0-0 1 0.3 1	○	○	1-0-0 1 0.3 1	1-0-0 1 0.3 1		
ND PA					2-0-0 2 0.7 2	1-0-0 1 0.3 1	○	○	1-0-0 1 0.3 1	2-0-0 2 0.7 2		
BH CD					2-0-0 2 0.7 2	1-0-0 1 0.3 1	○	○	1-0-0 1 0.3 1	2-0-0 2 0.7 2		
ITE WA					1-5-4 10 3.3 5	0-2-2 4 1.3 2	1-0-0 1 0.3 1	○	1-2-2 5 1.7 2	1-4-3 8 2.7 4		

Sheet # 2 of 2

nd	Plot	A87p2	Visit	Area	Isola-	Border
22	No.	26/27/28	No.	(ha) 30/31/32	tion 35/36	Type 37/38/39/40

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's TA Date 142 Yr. 79 Time 0930 to 0950 Temp. 64 Cloud 2
 initials 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (⁰C.) 16/17 cover 2

and 2 Plot A 87 pa Visit 1 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 Type 37/38/39/40

PHASE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
OVEN	x			x	10	3			3	4		
REVI	x x x	x	x	x	7	3			3	4		
SECTA	x	x	x	x	4	1			1	4		
ACFL	x	x	x	x	5	2			2	4		
HOWA	x	x	x	x	6	2			2	4		
FICR	V							1	1			
RBWO					1		1		1	1		
PIWO			x		1	1			1	1		
NOPA			x	x	2	1			1	2		
BHCO			x	x	2	1			1	2		
KEWA					1		1		1	1		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's TA Date 158 Yr. 79 Time 0632 to 0652 Temp. 65 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (⁰C.) 16/17 cover
 and 0 Plot A87p^a Visit 2 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
4BCU												
	x	x	x	x	4	1			1	4		
TUT	x	x			3	2			2	2		
HOWA	x				4	2			2	3		
ACFL					5	2			2	4		
KEHA				x	5	2			2	4		
SCJA					6	2			2	4		
REVI	x	x	x	x	9	3			3	4		
BNHA					1	1			1	1		
OVEN					6	2	1		3	3		1
BLJA					2		1		1	2		
WOTH					2	1			1	2		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's TA Date 166 Yr. 79 Time 0620 to 0640 Temp. 51 Cloud 0
 initials. 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 1 Plot A 87a Visit 3 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
OVEN	x x	x	x x	x	10	4			4	4		
HONA					4	1			1	4		
KACU					2	1			1	2		
REVI	x x	x	x	x	12	3	1		4	4		
ACFL	x x	x	x	x	11	3			3	4		
SCTA	x	x	x	x	4	1			1	4		
TUTI					2	1			1	2		
WOTH	x	x x	x x	x x	8	2	1		3	4		
KEWA		x	x	x	4	2			2	3		
BLJA					2		2		2	1		
CARD					1	1			1	1		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Sheet #1 of 2

Observer's TA Date 79 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover 2
 Initials. 1/2 (Julian) 3/4/5
 Plot A87p6 Visit Area 81 Isolation 35/36 Border Type 37/38/39/40
 No. 22 No. 26/27/28 No. 29 (ha) 30/31/32

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
WO TH					2-7-0 9 3 7	1-2-0 3 1 2	0-1-0 1 0.3 1	0	1-3-0 4 1.3 3	1-4-0 5 1.7 4	0	0
RE VI					15-12-17 44 14.3 17	4-3-3 10 3.3 4	0-0-1 1 0.3 1		4-3-4 11 3.7 4	4-4-4 12 4 4	0-0-1 1 0.3 1	2-0-1 3 1 2
OV EN					6-7-4 17 5.7 7	2-2-2 6 2 2	0-1-0 1 0.3 1		2-3-2 7 2.3 3	4-3-3 10 3.3 4	0	0-1-0 1 0.3 1
AC FL					1-2-2 5 1.7 2	1-1-1 3 1 1	0		1-1-1 3 1 1	1-2-2 5 1.7 2		0
TH TI					5-1-4 10 3.3 5	2-1-2 5 1.7 2	0		2-1-2 5 1.7 2	3-1-3 7 2.3 3		
WE WA					3-1-3 7 2.3 3	1-1-1 3 1 1	0		1-1-1 3 1 1	3-1-3 7 2.3 3		
RB WO					2-3-1 6 2 3	1-2-1 4 1.3 2	0		1-2-1 4 1.3 2	2-2-1 5 2.3 2		
CA RD					0-3-4 7 2.3 4	0-1-1 2 0.7 1	0-0-1 1 0.3 1		0-1-2 3 1 2	0-3-3 6 2 3		
BL JA					0-5-0 5 1.7 5	0 0	0-2-0 2 0.7 2		0-2-0 2 0.7 2	0-4-0 4 1.3 4		
HO WA					0-4-3 7 2.3 4	0-1-1 2 0.7 1	0		0-1-1 2 0.7 1	0-4-3 7 2.3 4		
YB CU					0-1-0 1 0.3 1	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-1-0 1 0.3 1		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

PAGE 1 of 2

Observer's TA Date 158 Yr. 79 Time 0550 to 0610 Temp. 64 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover

rd 0 Plot A 87⁶ Visit 2 Area Isola- Border
 22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
CARD	x	x		x	3	1			1	3		
WOTH	x	x -	x	x x	7	2	1		3	4		
OVEN	x		x	x ⊖ x	7	2	1		3	3		1
TUTI	x				1	1			1	1		
REVI	x x	x x	x x	x x	12	3			3	4		
BILJA	=	-	-	-	5		2		2	4		
HOWA	x	x	x	x	4	1			1	4		
RBVO		x		x	3	2			2	2		
YBCU	x				1	1			1	1		
SETA		x	x	x ⊖	4	1	1		2	3		1
WEWA			x		1	1			1	1		

X=singing male; -=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

PAGE 2

server's TA Date 158 Yr. 79 Time 055.0 to 061.0 Temp. 64 Cloud 2
initials. 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 ($^{\circ}\text{C.}$) 16/17 cover

nd 0 Plot A 8726 Visit 2 Area 30/31/32 Isola- 35/36 . Border 37/38/39/40
22 No. 26/27/28 No. 29 (ha) tion Type

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's TA Date 166 Yr. 79 Time 07 00 to 07 20 Temp. 54 Cloud 0
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 1 Plot A87p6 Visit 3 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 Type 37/38/39/40

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
OVEN	x	x	x		4	2			2	3		
WEWA	x	x	x		3	1			1	3		
XTVI	x	x	x	x	4	1			1	4		
MONA	x		x	x	3	1			1	3		
REVI	x	x	x	x	17	3	1		4	4	1	1
ACFL	x	x			2	1			1	2		
TUTI	x	x		x	4	2			2	3		
CARD	-	-	x	-	4	1	1		2	3		
COCR		out		-	☆							
DOWO			x		1	1			1	1		
RBWO				x	1	1			1	1		

X=singing males; +=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 SHEET #1 of 2

Observer's TA Date 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. ($^{\circ}$ C.) 16/17 Cloud cover 2
 and 22 Plot No. A889 Visit No. 29 Area (ha) 119 Isolation 35/36 Border Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
OV EN					6-6-9 21 7 9	2-2-3 7 2.3 3	0	0	2-2-3 7 2.3 3	4-4-4 12 4 4	0	0
EW PE					5-0-4 9 3 5	2-0-2 4 1.3 2	0		2-0-2 4 1.3 2	4-0-3 12 4 4		0
AC FL					3-4-2 9 3 4	1-1-1 3 1 1	0		1-1-1 3 1 1	3-4-2 9 3 4		0
RE VI					9-11-9 29 9.7 11	3-3-3 9 3 3	0		3-3-3 9 3 3	4-4-4 12 4 4		0-1-0 1 0.3 1
CA RD					3-2-7 12 4 7	0-0-1 1 0.3 1	2-1-1 4 1.3 2		2-1-2 5 1.7 2	2-2-4 8 2.7 4		0
MO DO					3-0-0 3 1 3	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	3-0-0 3 1 3		0
SC TA					5-6-2 13 4.3 6	2-2-1 5 1.7 2	0		2-2-1 5 1.7 2	3-4-2 9 3 4		0
WO TH					5-5-5 15 5 5	2-2-2 6 2 2	0		2-2-2 6 2 2	4-4-4 12 4 4		0
RB WO					4-2-1 7 1.7 4	2-1-1 4 1.3 2	0		2-1-1 4 1.3 2	3-2-1 6 2 3		0
TH TI					3-5-2 10 3.3 5	1-2-1 4 1.3 2	0		1-2-1 4 1.3 2	3-4-2 9 3 4		0
CA CH					3-0-0 3 1 3	0	2-0-0 2 0.7 2		2-0-0 2 0.7 2	2-0-0 2 0.7 2		0

Sheet # 2 of 2

nd	Plot	Visit	Area	Isola-	Border
22	No. 26/27/28	No. 29	(ha) 30/31/32	tion 35/36	Type 37/38/39/40
	A889				

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

PAGE 1 of 2

Observer's TA Date 142 Yr. 79 Time 0655 to 0715 Temp. 62 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover 2

nd 3 Plot A88a Visit 1 Area Isola- Border
 22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

PHASE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
QUEEN	x	x	x	x	6	2			2	4		
EWPE	+	x	x	x	5	2			2	4		
ACFL	x	x	x		3	1			1	3		
REVI	x	x	x	x	9	3			3	4		
CARD	-	-	-	-	3		2		2	2		
MODD	x	x	x		3	1			1	3		
SECTA	x	x	x	x	5	2			2	3		
WOTH	x	x	x	x	5	2			2	4		
RBWO	x		x	x	4	2			2	3		
TUT1		x	x	x	3	1			1	3		
REST		x			*							

Migrant

X=singing male; .-=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

PAGE # 2

server's TA Date 142 Yr. 79 Time 0655 to 0715 Temp. 62 Cloud 2
initials 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 ($^{\circ}\text{C.}$) 16/17 cover 2

nd 3 Plot A 88a Visit 1 Area 30/31/32 Isola- 35/36 Border 37/38/39/40
22 No. 26/27/28 No. 29 (ha) tion Type

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

server's TA Date 158 Yr. 79 Time 0815 to 0835 Temp. 69 Cloud 1
initials 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 ($^{\circ}\text{C.}$) 16/17 cover

rd 0 Plot A 88a Visit 2 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

[illegible]

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

PAGE 1 of 2

Observer's TA Date 166 Yr. 79 Time 07 50 to 08 10 Temp. 60 Cloud 0
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover

nd 2 Plot A88a Visit 3 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 tion 37/38/39/40 Type

P.H.A. DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
TUT					2	1			1	2		
OVEN		x	x x	x x	9	3			3	4		
REVI	x	x	x	x x	9	3			3	4		
WOTH	x x	x	x	x	5	2			2	4		
AMGO	V							1	1			
CARD	x	x -	x -	x -	7	1	1		2	4		
EWPE	x		x	x	4	2			2	3		
ACFL		x	x		2	1			1	2		
SCTA			x	x	2	1			1	2		
HOWA			+		1	1			1	1		
WEWA			x	x	2	1			1	2		

PAGE 2

ed 2 Plot A 88a Visit 3 Area Isola- . Border
22 No. 25/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

[illegible]

X=singing male; .-=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet #1 of 3

Observer's TA Date Yr. 79 Time to Temp. Cloud
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover 2
 and Plot A 88 6 Visit Area 119 Isolation Border
 22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

Observer	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
LD WA					4-0-0 4 1.3 4	1-0-0 1 0.3 1	0	0	1-0-0 1 0.3 1	4-0-0 4 1.3 4	0	0
OV EN					3-0-1 4 1.3 3	1-0-1 2 0.7 1	0		1-0-1 2 0.7 1	3-0-1 4 1.3 3		0
WO TH					11-9-6 26 8.7 11	3-3-2 8 2.7 3	0-0-1 1 0.3 1		3-3-3 9 3 3	4-4-4 12 4 4		0
RE VI					7-9-7 23 7.7 9	2-3-3 8 2.7 3	0		2-3-3 8 2.7 3	4-4-4 12 4 4		0
TH TI					3-4-8 15 5 8	1-1-3 5 1.7 3	0		1-1-3 5 1.7 3	3-4-4 11 3.7 4		0
NO PA					2-0-2 4 1.3 2	1-0-1 2 0.7 1	0		1-0-1 2 0.7 1	2-0-2 4 1.3 2		0
AL FL					4-11-9 24 8.0 11	1-3-3 7 2.3 3	0		1-3-3 7 2.3 3	4-4-4 12 4 4		0
CA RD					1-0-0 1 0.3 1	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	1-0-0 1 0.3 1		0
RB WO					4-4-6 14 4.7 6	1-2-2 5 1.7 2	0		1-2-2 5 1.7 2	4-3-4 11 3.7 4		0-0-1 1 0.3 1
BW HA					1-0-0 1 0.3 1	0 0 0	1-0-0 1 0.3 1		1-0-0 1 0.3 1	1-0-0 1 0.3 1		0
SC TA					2-6-4 12 4 6	1-1-1 3 1 1	0-1-0 1 0.3 1		1-2-1 4 1.3 2	2-4-4 10 3.3 4		0-1-0 1 0.3 1

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 Sheet #2 of 3

Observer's initials 1/2 Date (Julian) 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover 2
 and Plot A88 b Visit No. 29 Area (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40
22 No. 26/27/28

Observer	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
YB CH					3-0-0 3 1 3	1-0-0 1 0.3 1	0	0	1-0-0 1 0.3 1	3-0-0 3 1 3	0	0
HE WA					3-3-2 8 2.7 3	0-2-1 3 1 2	1-0-0 1 0.3 1		1-2-1 4 1.3 2	3-2-2 7 2.3 3		0
CA CH					4-8-5 17 5.7 8	1-0-0 1 0.3 1	1-3-2 6 2 3		2-3-2 7 2.3 3	2-4-4 10 3.3 4		0-2-0 2 0.7 2
WB NH					2-0-3 5 1.7 3	1-0-1 2 0.7 1	0		1-0-1 2 0.7 2	2-0-3 5 1.7 3		0
BA WW					1-0-1 2 0.7 1	1-0-1 2 0.7 1	0		1-0-1 2 0.7 1	1-0-1 2 0.7 1		0
EW PE					1-0-2 3 1 2	1-0-1 2 0.7 1	0		1-0-1 2 0.7 1	1-0-2 3 1 2		0
HO WA					1-1-0 2 0.7 1	1-1-0 2 0.7 1	0		1-1-0 2 0.7 1	1-1-0 2 0.7 1		0
GC FL					0-4-0 4 1.3 4	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-4-0 4 1.3 4		0
AM GO					0-1-0 1 0.3 1	0	0-1-0 1 0.3 1		0-1-0 1 0.3 1	0-1-0 1 0.3 1		0
HA WO					0-1-4 5 1.7 4	0-1-1 2 0.7 1	0		0-1-1 2 0.7 1	0-1-4 5 1.7 4		0
BG GN					0-1-4 5 1.7 4	0	0-1-1 2 0.7 1		0-1-1 2 0.7 1	0-1-4 5 0.7 4		0

sheet # 3 of 3

22	No.	26/27/28	No.	29	(Ha)	30/31/32	LT01	33/34	Type	37/38/39/40
----	-----	----------	-----	----	------	----------	------	-------	------	-------------

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

PAGE # 1 of 2

Observer's TA Date 142 Yr. 79 Time 0740 to 0800 Temp. 62 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover 2

nd 3 Plot A886 Visit 1 Area Isola- Border
 22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50
	1	2	3	4								
LOWA	x	x	x	x	4	1			1	4		
OVER	x	x	x		3	1			1	3		
WOTH	x x	x x	x x	x x	11	3			3	4		
REVI	x	x	x x	x	7	2			2	4		
TUTI	x			x	3	1			1	3		
NOPA	x			x	2	1			1	2		
ACFL	x	x	x	x	4	1			1	4		
CARD	x				1	1			1	1		
RBWD	x	x	-	-	4	1			1	4		
REST	-			x	*							
BNHA					1		1		1	1		

MIGRANT

PAGE # 2

nd 3 Plot A 886 Visit 1 Area 30/31/32 Isola- 35/36 . Border 37/38/39/40
22 No. 26/27/28 No. 29 (ha) tion Type

[illegible]

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

PAGE 1 of 2

Observer's TA Date 158 Yr. 79 Time 0720 to 0740 Temp. 67 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (⁰C.) 16/17 cover
 and 0 Plot A886 Visit 2 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40 Foggy

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
ACFL	x	x	x	x	11	3			3	4		
WOTH	x	x	x	x	9	3			3	4		
SCTA	⊖	x	x	x	6	1	1		2	4		1
REVI	x	x	x	x	9	3			3	4		
CACH	-	=	⊖	⊖	8		3		3	4		2
TUTI	x	x	x	x	4	1			1	4		
KEWA	x			x	3	2			2	2		
GCFZ	x	x	x	x	4	1			1	4		
RBWO		x	x	x	4	2			2	3		
AMGO		or(-) ?			1		1		1	1		
COCR			outside		*							

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 PAGE 1 of 2

Observer's TA Date 166 Yr. 79 Time 0825 to 0845 Temp. 62 Cloud 0
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (6C.) 16/17 cover
 and 2 Plot A 88b Visit 3 Area 30/31/32 Isolation 35/36 Border 37/38/39/40
22 No. 26/27/28 No. 29 (ha)

PHASE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
HAWO	x	x	x	x	4	1			1	4		
RBWO	x	x	-	x	6	2			2	4		1
TUTI	x	x	x	x	8	3			3	4		
CACH	-	=	-	-	5		2		2	4		
WOTH	x	x	x	x	6	2	1		3	4		
ACFL	x	x	x	x	9	3			3	4		
REVI	x	x	x	x	7	3			3	4		
YTVI					1	1			1	1		
SCTA	x	x	x	x	4	1			1	4		
KEWA	x			x	2	1			1	2		
BGGN	-	-	-	-	4		1		1	4		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet #1 of 2

Observer's MH Date Yr. 79 Time 6/7 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover 2
 initials 1/2 (Julian) 3/4/5
 and 22 Plot A912 Visit Area 135 Isola- Border
 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
RE VI					11-6-12 29 9.7 12	4-2-3 9 3 4	0	0	4-2-3 9 3 4	4-4-4 12 4 4	0	0
TH TI					4-4-4 12 4 4	1-1-1 3 1 1	0		1-1-1 3 1 1	4-4-4 12 4 4		①
EW TE					4-4-4 12 4 4	1-1-1 3 1 1	0		1-1-1 3 1 1	4-4-4 12 4 4		0
WD TH					4-0-6 10 3.3 6	2-0-2 4 1.3 2	0-0-1 1 0.3 1		2-0-3 5 1.7 3	3-0-4 7 2.3 4		1-0-1 2 0.7 1
OV EN					3-7-5 15 5 7	2-3-2 7 2.3 3	0		2-3-2 7 2.3 3	3-4-4 11 3.7 4		0
CA CH					2-0-4 6 2 4	1-0-0 1 0.3 1	0-0-1 1 0.3 1		1-0-1 2 0.7 1	2-0-4 6 2 4		0
SC TA					3-5-4 12 4 5	1-2-1 4 1.3 2	0-0-1 1 0.3 1		1-2-2 5 1.7 2	3-4-3 10 3.3 4		0
BA WW					1-0-0 1 0.3 1	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	2-0-0 1 0.3 1		0
DO WD					3-0-0 3 1 3	0	1-0-0 1 0.3 1		1-0-0 1 0.3 1	3-0-0 3 1 3		1-0-1 1 0.3 1
HE WA					2-4-0 6 2 4	1-1-0 2 0.7 1	0		1-1-0 2 0.7 1	2-4-0 6 2 4		0
RB WD					1-1-1 3 1 1	0	1-1-1 3 1 1		1-1-1 3 1 1	1-1-1 3 1 1		0

Sheet # 20 L 2

nd

PHAD
DE

HO
WA

CA
RD

IN
B4

AL
FL

CO
CR

WE
WA

YT
VI

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

page 1

server's initials MH Date 146 Yr. 79 Time 0747 to 0807 Temp. 51 (°C.) 16/17 Cloud cover 16/17
 nd 5 Plot A91 Visit 1 Area 30/31/32 Isolation 35/36 Border Type 37/38/39/40
22 No. 26/27/28 No. 29 (ha)

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
AE VD	x x x	x x x	x x x	x x	11	4			4	4		
TH T2	x	x	x	x	4	1			1	4		
FA DE	x	x	x	x	4	1			1	4		
WO TB	⊙		x	x	4	2			2	3		1
OV SH	x	x	x		3	2			2	3		
CA CH	x	x			2	1			1	2		
AM RE (low)	x	x	x	x	4	1			1	4		
SA TA	x	x	x		3	1			1	3		
BA WW		x			1	1			1	1		
DO WO		-	⊙	-	3		1		1	3		1
HE WR					2	1			1	2		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 Parcel

Observer's MH Date 3/4/5 Yr. 79 Time 0809 to 0829 Temp. ⁷³ 16/17 Cloud 0
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 5 Plot A 91 (9) Visit 2 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 tion 37/38/39/40 Type

PHASE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
CA AD	x	x	x	x	5	1	1		2	4		
RE VI	x	x	x	x	6	2			2	4		
TA BU	x			x	2	1			1	2		
HE WA	x	x	x	x	4	1			1	4		
OV EN	x	x	x	x	7	3			3	4		
TH TI	x	x	x	x	4	1			1	4		
EA RE	x	x	x	x	4	1			1	4		
HO WA	x	(9)	(9)	x	4	1			1	4		1
SC TA	x	x	-	-	5	2			2	4		
AC FL	x				1	1			1	1		
AM CK			v	v				2	2			

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's MH Date 170 Yr. 79 Time 0650 to 0710 Temp. 60 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 4 Plot A91① Visit 3 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-6 Σ adult <50
	1	2	3	4								
CA CH	-	-	-	-	4		1		1	4		
TY TF	x	x	x	x	4	1			1	4		
OV EN	x x	x	x	x	5	2			2	4		
AE VI	x x x	x x	x x	x x	12	3			3	4		
CA AD	-			x	2	1			1	2		
YT VS	x				1	1			1	1		
AM CR	V							1	1			
SC TA	x		x	x	4	1	1		2	3		
HO WB					2	1			1	2		
WO TH		x ⊖ x		x	6	2	1		3	4		1
ED PE	x	x	x	x	4	1			1	4		

1022

nd

PHASE
DE

RB
WD

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet #1043

Observer's MH Date 1/2 (Julian) 3/4/5 Yr. 79 Time (start) 8/9/10/11 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover 2
 ad. 22 Plot A916 Visit No. 29 Area (ha) 135 Isolation 30/31/32 Border Type 35/36 37/38/39/40

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
HO WA					7-3-5 15 5 7	2-1-2 5 1.7 2	0	0	2-1-2 5 1.7 2	4-3-3 10 3.3 4	0	0
OV EN					8-8-15 31 10.3 15	3-4-5 12 4 5	0		3-4-5 12 4 5	4-3-4 11 3.7 4		0-0-1 1.3 1
BL JA					2-0-2 4 1.3 2	0	2-0-1 3 1 2		2-0-1 3 1 2	2-0-2 4 1.3 2		0
AC FL					6-7-4 17 5.7 7	2-2-2 6 2 2	0		2-2-2 6 2 2	4-4-3 11 3.7 4		0
DO WD					4-6-2 12 4 6	0	1-2-1 4 1.3 2		1-2-1 4 1.3 2	4-4-2 10 3.3 4		0-2-0 2 0.7 2
WD TH					2-2-10 14 4.7 10	1-1-2 4 1.3 2	0-0-1 1 0.3 1		1-1-3 5 1.7 3	2-2-4 8 2.7 4		0-0-1 1 0.3 1
CO CR					0-4-0 4 1.3 4	0	0-1-0 1 0.3 1	2-0-3 5 1.7 3	2-1-3 6 2 3	0-4-0 4 1.3 4		0
RE VI					11-10-10 31 10.3 11	4-3-3 10 3.3 4	0-1-1 2 0.7 1	0	4-4-4 12 4 4	4-4-4 12 4 4		0-1-0 1 0.3 1
RB WD					5-1-2 8 2.7 5	0	2-1-1 4 1.3 2	0	2-1-1 4 1.3 2	4-1-2 7 2.3 4		0
CA AD					7-5-5 17 5.7 7	3-2-2 7 2.3 3	0	0	3-2-2 7 2.3 3	4-4-3 11 3.7 4		0
EW PE					4-3-0 7 2.3 4	1-1-0 2 0.7 1	0	0	1-1-0 2 0.7 1	4-3-0 7 2.3 4		0

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)
 sheet #2 of 3

Observer's Date Yr. 79 Time to Temp. Cloud
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover 2

nd Plot A91 6 Visit Area Isola- Border
 22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

Observer	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50
	1	2	3	4								
RS TO					2-7-2 11 2.7 7	1-1-1 3 1 1	0-2-0 2 0.7 2	0	1-3-1 5 1.7 3	2-4-2 8 2.7 4	0	0-1-0 1 0.3 1
TY TI					1-1-4 6 2 4	1-1-2 4 1.3 2	0	0	1-1-2 4 1.3 2	1-1-4 6 2 4		0
AM LO					0-1-0 1 0.3 1	0	0-1-0 1 0.3 1	1-0-0 1 0.3 1	1-1-0 2 0.7 1	0-1-6 1 0.3 1		0-1-0 1 0.3 1
HA WO					2-0-0 2 0.7 2	0	1-0-0 1 0.3 1	0	1-0-0 1 0.3 1	2-0-0 2 1.7 2		0
HE WA					1-1-3 5 1.7 3	1-1-1 3 1 1	0		1-1-1 3 1 1	1-1-3 5 1.7 3		0
LO WA					0-2-0 2 0.7 2	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-2-0 2 0.7 2		0
AM GO					0-1-0 1 0.3 1	0	0-1-0 1 0.3 1		0-1-0 1 0.3 1	0-1-0 1 0.3 1		0-1-0 1 0.3 1
CO YE					0-1-0 1 0.3 1	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-1-0 1 0.3 1		0
CA CH					0-2-0 2 0.7 2	0	0-1-0 1 0.3 1		0-1-0 1 0.3 1	0-2-0 2 0.7 2		0
AM RE					0-1-0 1 0.3 1	0-1-0 1 0.3 1	0		0-1-0 1 0.3 1	0-1-0 1 0.3 1		0
NO PA					0-0-1 1 0.3 1	0-0-1 1 0.3 1	0		0-0-1 1 0.3 1	0-0-1 1 0.3 1		

Sheet # 3 of 3

nd

PHASE
DE

УВ
СЧ

SC
TA

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Page 1

Observer's MH Date 146 Yr. 79 Time 0828 to 0848 Temp. 53 Cloud 2
 Initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (⁰C.) 16/17 cover 2
 End 4 Plot A91(6) Visit 1 Area Isolation Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 35/36 Type 37/38/39/40

SP. PHA ODE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
HO WA		x	x	x	7	2			2	4		
OV EN	x	x			8	3			3	4		
AL JA	-		-		2		2		2	2		
AO FL	x	x	x	x	6	2			2	4		
DO WO	-	-	-		4		1		1	4		
WO TH	x			x	2	1			1	2		
AO CR	-	-	-	-	5		2 →		2	4		
RE VE	x	x	x	x	11	4			4	4		
RB WO	-	-	-	-	5		2		2	4		
CA RD	x	x	x	x	7	3			3	4		
CA PB					4	1			1	4		

X=singing male; -=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

P9201

Observer's MH Date 3/4/5 Yr. 77 Time 0722 to 0742 Temp. 70 Cloud 0
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 3 Plot A91 (6) Visit 2 Area 30/31/32 Isola- Border
 No. 26/27/28 No. 29 (ha) 35/36 Type 37/38/39/40

PHASE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
OV EN	X X X	X X	X X		8	4			4	3		
CA RD	X	X X	X	X	5	2			2	4		
EA PE	X	X	X		3	1			1	3		
LO WA	X	X			2	1			1	2		
AE V3	⊗ X	X X	X X	X X	10	3	1		4	4		1
AL FL	X	X X	X X	X	7	2			2	4		
AM CR	-	-	-	-	4		1		1	4		
RS TV	⊗	⊗	-	X	7	1	2		3	4		1
DO WD	⊗	⊗	⊗	⊗	6		2		2	4		2
AB LU	-				1		1		1	1		
WO TH	X	X			2	1			1	2		

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

page 1

Observer's MH Date 170 Yr. 79 Time 0818 to 0839 Temp. 63 Cloud 2
 initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (6 C.) 16/17 cover
 and 3 Plot A91(6) Visit 3 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 tion 35/36 Type 37/38/39/40

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
ME VL	x	x	x	x	10	3	1		4	4		
PA WD	x				1	1			1	1		
KE WD	x	x	x		3	1			1	3		
AC FL	x		x	x	4	2			2	3		
WO TN	x	x	x	x	10	2	1		3	4		1
RS TD	x	x			2	1			1	2		
YB CA					2	1			1	2		
SC TA	x	x		x	3	1			1	3		
RB WD					2		1		1	2		
HO WP	x	x		x	5	2			2	3		
OV KN	x	x	x	x	15	5			5	4		1

page 2

nd 22 Plot A91(6) Visit 3 Area 30/31/32 Isola- 35/36 . Border 37/38/39/40
No. 26/27/28 No. 29 (ha) tion Type

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Sheet #1 of 2

Observer's MH Date 79 Yr. 6/7 Time (start) 8/9/10/11 to 12/13/14/15 Temp. (°C.) 16/17 Cloud cover 2
 Initials. 1/2 (Julian) 3/4/5
 and 22 Plot A91 C Visit 29 Area 135 (ha) 30/31/32 Isolation 35/36 Border Type 37/38/39/40
 No. 26/27/28 No. 29

PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adults <50'
	1	2	3	4								
RE VI					12-4-12 33 11 12	4-4-3 11 3.7 4	0-0-1 1 0.3 1	0	4-4-4 12 4 4	4-3-4 11 3.7 4	0	0
KE WA					4-0-0 4 1.3 4	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	4-0-0 4 1.3 4		
OV EN					6-14-11 31 10.3 14	2-4-3 9 3 4	0		2-4-3 9 3 4	4-4-4 12 4 4		
AL FL					4-4-5 13 4.3 5	1-1-2 4 1.3 2	0		1-1-2 4 1.3 2	4-4-4 12 4 4		
WO TH					4-2-4 10 3.3 4	2-1-1 4 1.3 2	0		2-1-1 4 1.3 2	3-2-4 9 3 4		
BO BW					2-0-0 2 0.3 2	1-0-0 1 0.3 1	0		1-0-0 1 0.3 1	2-0-0 2 0.7 2		
CO CR					0	0	0	1-0-1 2 0.7 1	1-0-1 2 0.7 1	0		
TY TI					1-2-2 5 1.7 2	1-1-1 3 1 1	0	0	1-1-1 3 1 1	1-2-2 5 1.7 2		
CA CH					1-1-2 4 1.3 2	1-0-1 2 0.7 1	0-1-0 1 0.3 1	0	1-1-1 3 1 1	1-1-2 4 1.3 2		
DO WO					5-0-0 5 1.7 5	0	2-0-0 2 0.7 2	0	2-0-0 2 0.7 2	4-0-0 4 1.3 4		
SC TA					0-4-1 5 1.7 4	0-0-1 1 0.3 1	0-2-0 2 0.7 2	0	0-2-1 3 1 2	0-4-1 5 1.7 4		

Sheet # 2 of 2

Plot	<u>A91 c</u>	Visit		Area		Isola-	Border
No.	<u>26/27/28</u>	No.	<u>29</u>	(ha)	<u>30/31/32</u>	tion	Type
						<u>35/36</u>	<u>37/38/39/40</u>

[illegible]

X=singing male; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's MH Date 3/4/5 Yr. 79 Time 0857 to 0917 Temp. 75 Cloud 16/17
 Initials. 1/2 (Julian) 3/4/5 6/7 (start) 8/9/10/11 12/13/14/15 (°C.)
 rd 4 Plot A91 Visit 2 Area 30/31/32 Isola- Border
22 No. 26/27/28 No. 29 (ha) 35/36 tion 37/38/39/40 Type

PHASE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing. adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
DO NO	-	-	-	-	5		2		2	4		
AC FL	x	x	x	-	4	1			1	4		
OV EN	x	x	x	x	14	4			4	4		
SC TA	x	x	x	x	4	1			1	4		
RE VB		x	x	x	9	4			4	3		
RB WO		-	-	-	4		2		2	3		
WO TH			x	x	2	1			1	2		
TH TL			x	x	2	1			1	2		
CA CH				-	1		1		1	1		
BH CO				v				1	1			

X=singing males; --=non-singing ad.; +=immature; V=flyover (CIRCLE BIRDS SEEN WITHIN 50 FEET)

Observer's MH Date 170 Yr. 79 Time 0730 to 0750 Temp. 61 Cloud 2
 initials. 1/2 (Julian) 3/4/5 (start) 8/9/10/11 12/13/14/15 (°C.) 16/17 cover
 and 5 Plot A910 Visit 3 Area Isola- Border
22 No. 26/27/28 No. 29 (ha) 30/31/32 tion 35/36 Type 37/38/39/40

P. PHA DE	5-minute interval				49-50 Σ 5-min interv.	51-52 Σ sing. males	53-54 Σ non- sing- adults	55-56 Σ adult fly- overs	57-58 Σ all adults	59 F	60-61 Σ immat- ures	62-63 Σ adult <50
	1	2	3	4								
RE VB	x x	x x	x x	x x	12	3	1		4	4		
DV EN	x x	x	x x	x x	11	3			3	4		
WO TH	x	x	x	x	4	1			1	4		
AC FL	x	x	x	x	5	2			2	4		
CD CH	-			x	2	1			1	2		
RB WO	-				2		2		2	1		
TH TE	x	x			2	1			1	2		
BH CO		-?			1		1		1	1		
AN CA			v					1	1			
SC TA			x		1	1			1	1		